

## Notch Therapy How-To Guide

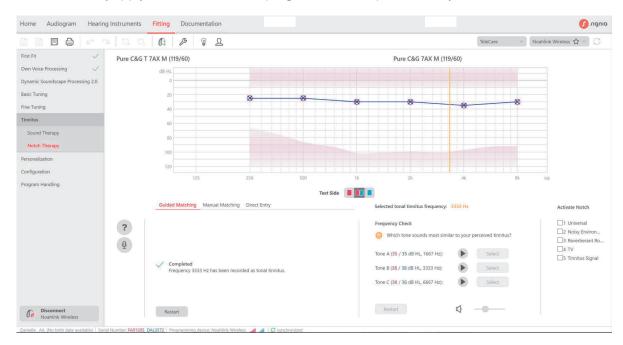
## A therapy approach clinically proven to reduce the annoyance of tonal tinnitus

Tinnitus management through acoustic therapy is the treatment method of choice for many hearing care professionals. Tonal tinnitus, which includes all types of pure-tone like whistling, ringing or humming, is the most common form of tinnitus.\(^1\) New research shows rather than using traditional noise therapy that treats the effects of tinnitus, spectral notching can treat tonal tinnitus from its anatomic origin. The therapeutic effects of spectral notching can be achieved by wearing hearing instruments featuring Notch Therapy.

Unlike traditional sound therapy which introduces another acoustic stimulus to the patient, Notch Therapy is inaudible and works in the background to relieve the annoyance of tinnitus. Based on the concept of "re-attracting" lateral inhibition<sup>2</sup>, Notch Therapy uses spectral notching and applies it to traditional amplification with hearing instruments. It aims to attack tinnitus on two fronts: 1) enhancing the auditory environment by amplification, 2) suppressing the tinnitus associated neural hyperactivity with enhanced lateral inhibition.

A double-blind study showed that when compared to control subjects who used hearing aid amplification alone, those who used hearing aids with Notch Therapy exhibited a clear improvement in as few as three weeks and maintained the benefit past six months.<sup>3</sup>

Notch Therapy is only available in Signia hearing instruments. Notch Therapy can be customized to treat the patient's tonal tinnitus in a few simple steps with Connexx® fitting software. Find the patient's pitch match by using Guided Matching, Manual Matching, or choosing a known pitch from Direct Entry. Perform the frequency check to verify the correct octave of the pitch match and finally apply the notch to desired programs. It's that quick and easy.



- 1. Turner, J.S. (1990). Auditory dysfunction: Tinnitus. In H.K. Walker, W.D. Hall, & J.W. Hurst (Eds.), Clinical methods: The history, physical, and laboratory examinations. Boston: Butterworths.
- 2. Teismann, H., Okamoto, H., & Pantev, C. (2011). Short and intense tailor-made notched music training against tinnitus: The tinnitus frequency matters. PLoS ONE, 6(9).
- 3. Strauss, D.J., Corona-Strauss, F.I., Haab, L., & Hannemann, R. (2015). Notched environmental sounds: a new hearing aid-supported tinnitus treatment evaluated in 20 patients. Clinical Otolaryngology.