Troubleshooting Guide

Neuro Processor Technology

Patient's Own Voice

Voice Sounds

In a barrel/tunnel

- Echoes
- Hollow
- Like they have a cold/ears plugged

Voice Sounds

Muffled

Decrease Low Frequency Gain

Pro Fit Adjustments

Increase Loud Gain

Increase Maximum Output

Increase High Frequency Gain

Decrease Low Frequency Gain

Pro Fit Adjustments

Decrease Moderate Gain at 1000 Hz and/or 1500 Hz

Increase Moderate Gain at 1000 Hz and/or 1500 Hz

Decrease gain using the Occlusion Control

Other Considerations

- Occlusion may be due to the physical presence of the hearing aid and not because of amplification; to test, turn off the hearing aid and have the patient speak
 - 1. Report persists—issue is occlusion; address with acoustic modifications
 - Enlarge vent diameter
 - Shorten and/or taper canal
 - Remake hearing aid or earmold with different canal length
 - 2. Report resolved—issue is amplification; address with response adjustments

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 - Shorten and/or taper canal
 - Remake hearing aid or earmold with different canal length
 - Report resolved issue is amplification; address with response adjustments

- **Voice Sounds**
- Distorted
- Crackles
- Unnatural/like a megaphone

Pro Fit Adjustments

- Decrease Moderate Gain at 1000 Hz and/or 1500 Hz
- Decrease Loud Gain
- Decrease Overall Output

Other Considerations

 If decreasing Overall Output worsens sound quality, consider increasing Overall Output

Hearing in Noise

Patient has Difficulty

 Understanding speech in background noise

Pro Fit Adjustments

- Verify Adaptive Directionality is enabled via Sound Manager screen
- Consider enabling a Fixed Directional microphone response

Increase Overall Gain at 1000 Hz and/or 1500 Hz

- Increase Speech in Noise Control via Sound Manager screen •
- Increase Overall Gain at 1000 Hz and/or 1500 Hz, then higher frequency gain
- Decrease Soft Low Frequency Gain

Other Considerations

- If device does not have directional microphones, consider recommending a directional device
- Consider enabling Edge Mode+ via the User Control screen •
- Consider a StarLink Remote Control 2.0 and set the Favorite Button to Edae Mode+
- Consider StarLink remote microphone options to improve signal-to-noise ratio
- Consider turning Speech in Noise off for severe-to-profound hearing loss •

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Voices at a distance better than nearby

Patient Hears

Patient Reports

- Low tolerance for noise
- Background noise too loud

- Decrease Overall Output
- Verify Adaptive Directionality is enabled via Sound Manager screen

Decrease Speech in Noise setting via the Sound Manager screen

Intelligibility

Reports

- I hear better without my hearing aids
- Speech is unclear/unnatural
- Speech in quiet is not clear
- TV/Radio is not clear

Speech Sounds

Muffled even when in guiet

Pro Fit Adjustments

- Increase Overall Gain at 1000 Hz and/or 1500 Hz
- Decrease Speech in Noise setting via the Sound Manager screen
- Decrease Speech in Noise setting via the Sound Manager screen
- Increase Low Frequency Gain for Streamed program

Other Considerations

- Consider a customized program via their hearing aid mobile app
- Consider adding a StarLink TV Streamer •
- Consider enabling Edge Mode+ via the User Control screen
- Consider StarLink Remote Microphone options to improve signal-to-noise ratio •
- May need to counsel on fact that poor speech clarity may be due to poor speech discrimination
- Consider a StarLink Remote Control 2.0 and set the Favorite Button to Edge Mode+

Other Considerations

- Quiet adjusts expansion and low-level noise reduction to ensure the hearing aids are quiet in quiet environments
- Consider enabling Edge Mode+ via the User Control screen

*Available on select 2.4 GHz hearing aids. Contact your rep for specific information

Pro Fit Adjustments

Pro Fit Adjustments

Increase Overall Soft Gain

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- Increase Speech in Noise setting via the Sound Manager screen
- Increase Transients setting via Sound Manager screen

Pro Fit Adjustments

- Decrease Quiet setting via the Sound Manager screen
- Increase Soft and Moderate Gain

Streamed Input

Reports

Streamed input doesn't have enough bass

Reports

Streamed input is not loud enough

Reports

External environment is louder than the streamed signal

Loudness

Overall Too Loud

- Voices too loud
- All sounds too loud
- Harsh/too loud

Loudness Comfort

- Sounds are painful •
- Clattering dishes too loud ۲
- Running water
- Other environmental • sounds too loud

Overall Too Soft

- Voices too soft
- All sounds too soft
- Hearing aids too soft

Pro Fit Adjustments

- Enable Bass Boost via the Accessories screen
- Increase Gain for Low Frequencies
- Increase Output for Low Frequencies

Pro Fit Adjustments

- Enable Overall Boost via the Accessories screen
- Enable Treble Boost for phone calls via the Accessories screen
- Enable Bass Boost via the Accessories screen
- Enable a program with increased low frequency gain for the patient to switch to before they begin streaming
- Enable a Music program for the patient to switch to before they begin streaming

Pro Fit Adjustments

Mute the hearing aid microphones

Other Considerations

Consider a customized program via the hearing aid mobile app

Other Considerations

 Consider setting the Hearing Aid Mic While Streaming setting to Off via the Accessories screen or the hearing aid mobile app

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Other Considerations

- May need to start with lower gain settings than the prescriptive target recommends
- Patient may be unaccustomed to amplification or may be accustomed to lower gain devices
- May need to consider a different fitting formula
- Compression ratios are increased as the curves move closer together; decreased as the curves move farther apart.
- Consider enabling Edge Mode+ via the User Control screen.

Other Considerations

- Ensure Best Fit is using e-STAT 2.0 fitting formula
- Enter pure tone UCLs for at least 500 Hz and 3000 Hz to personalize and help optimize the output settings
- Utilize Speech Mapping to identify frequencies causing discomfort
- Compression Ratios are increased as the curves move closer together; decreased as the curves move farther apart

Other Considerations

- Utilize Speech Mapping to verify audibility
- Patient may not perceive the aid as being loud enough depending on previous hearing aid experience
- Compression Ratios are increased as the curves move closer together; decreased as the curves move farther apart
- Quiet adjusts expansion and low-level noise reduction to ensure the hearing aids are quiet in quiet environments

Pro Fit Adjustments

- Change Experience Level to provide less gain (3 to 2 or 2 to 1)
- Decrease Overall Gain above 1000 Hz
- Decrease Gain using Occlusion Control •
- Decrease High Frequency Loud Gain

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Increase Transients setting via the Sound Manager screen

Increase Machine Noise setting via the Sound Manager screen

Decrease High Frequency Loud Gain

Pro Fit Adjustments

Decrease Overall Output

Pro Fit Adjustments

Increase Overall Gain

Increase Overall Output

Increase Overall Soft Gain

Increase Overall Moderate Gain

Increase Low Frequency Overall Gain

Decrease Quiet setting via the Sound Manager screen

Decrease Overall Loud Gain

Sound Quality

Noisy

- Hearing aids are noisy
- Refrigerator hum too loud
- Hearing aids are noisy in quiet environments

Pumping

- Hearing aids cut in and out
- Hearing aids cut in and out when patient speaks
- Loud sounds fade in and out

Shutting Down

- Hearing aids shut down with loud sounds
- Hearing aids cut out when patient speaks
- Loud sounds fade in and out

Transient Sounds are

Bothersome

Transient Sounds are

Too Soft/Unnatural

Sounds are

- Hollow
- Muffled

Pro Fit Adjustments

- Increase Quiet setting via Sound Manager screen
- Decrease Soft Gain at 750 Hz and below
- Decrease Overall Soft Gain

Other Considerations

 Quiet adjusts expansion and low-level noise reduction to ensure the hearing aids are quiet in quiet environments

Pro Fit Adjustments

- Increase Overall Loud Gain
- Decrease Compression Ratios
- Decrease Machine Noise setting via Sound Manager screen
- Decrease Consonant Brightness

Pro Fit Adjustments

- Decrease Transients setting via the Sound Manager screen
- Decrease Compression Ratios
- Increase Overall Output/MPO
- Increase Overall Gain
- Increase Overall Soft Gain
- Increase Overall Loud Gain

Pro Fit Adjustments

Increase Transients setting via Sound Manager screen

Pro Fit Adjustments

• Decrease Transients setting via Sound Manager screen

Pro Fit Adjustments

- Decrease Loud Gain at 500 Hz and 750 Hz
- Increase Moderate Gain at 1000 Hz and/or 1500 Hz
- Increase Moderate High Frequency Gain

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Other Considerations

Consider turning off for severe-to-profound hearing loss

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Other Considerations

Increase Vent Size and update Acoustic Options to match hearing aid

Sound Quality (Continued)

- Sharp
- Tinny

Music

Pro Fit Adjustments

- Increase gain between 2000 Hz-4000 Hz, then increase gain at 750 Hz
- Increase Low Frequency Gain •
- Decrease Overall Output above 1000 Hz
- Increase Speech in Noise •
- Increase Compression •
- Change Experience Level to provide less gain (3 to 2 or 2 to 1)
- Consider enabling the Automatic feature within Experience Manager •

Other Considerations

- Utilize Speech Mapping or Verify Comfort to identify areas of sharpness
- Compression Ratios are increased as the curves move closer together; • decreased as the curves move farther apart
- Consider Best Fit using a different fitting formula
- Patient's auditory perception may be distorted due to long-standing high-frequency hearing loss; counseling is key

Other Considerations

- Consider the Fine-Tuning screen for patients who require very discrete frequency-specific adjustments
- Consider use of StarLink streaming accessory
- Consider enabling Edge Mode+ via the User Control screen

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Too tinny in the Music Program

Too much bass in the Music Program

Music Sounds

Music Sounds

Feedback

Hearing Aids

Hearing Aids

Sound warbly with own

voice or other inputs

- Whistle
- Chirp

Pro Fit Adjustments

- Decrease treble via QuickFit screen
- Pro Fit Adjustments
 - Decrease bass via QuickFit screen
- Increase treble via QuickFit screen

Pro Fit Adjustments

- Initialize feedback cancellation with hearing aid in the ear
- Reduce Adaptive Feedback Cancellation Sensitivity (Strong to Subtle. Subtle to Off) via the Feedback Canceller screen
- Reduce Overall Gain •

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- Decrease Consonant Brightness

Other Considerations

- Manage acoustic options for better fit and positioning of the hearing aid in the ear
- Utilize Speech Mapping to identify feedback peak and decrease gain at peak
- Feedback cancellation needs to be re-initialized any time the acoustic • characteristics of the hearing aid are changed (e.g. shell modification, new earmold)

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- Manage acoustic options for better fit and positioning of the hearing aid in the ear
- Utilize Speech Mapping to identify feedback peak and decrease gain at peak
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Increase bass via QuickFit screen •