Troubleshooting Guide

Thrive[™] Technology



Patients Own Voice

Voice Sounds

- In a barrel/tunnel
- Echoes
- Hollow
- Like they have a cold/ears plugged

Inspire Adjustments

- Decrease Overall Gain using Occlusion Control
- Decrease Low Frequency Gain
- Decrease Moderate Gain at 1000 Hz and/or 1500 Hz

Voice Sounds

Muffled

Inspire Adjustments

- Increase Moderate Gain at 1000 Hz and/or 1500 Hz
- Increase Loud Gain
- Increase Overall Output
- Increase High Frequency Gain
- Decrease Low Frequency Gain

Voice Sounds

- Distorted
- Crackles
- Unnatural/like a megaphone

Inspire Adjustments

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

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 with different canal length depending on current hearing aid
 - 2. Report resolved—issue is amplification; address with frequency adjustments

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Other Considerations

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

Hearing in Noise

Patient has Difficulty

 Understanding speech in background noise

Inspire Adjustments

- Verify Adaptive Directionality is enabled via Sound Manager screen
- Increase Overall Gain at 1000 Hz and/or 1500 Hz, then higher frequency gain
- Decrease Soft Low Frequency Gain
- Enable Directionality Plus via Sound Manager screen Details link
- Increase Speech and Noise via Sound Manager screen
- Turn Acuity Immersion Directionality off if soft speech sounds are muffled

Patient Hears

 Voices at a distance better than near

Inspire Adjustments

- Increase Overall Gain at 1000 Hz and/or 1500 Hz
- Increase Overall Soft Gain
- Set Speech and Noise for Less Activity via Sound Manager screen

Patient Reports

- Low tolerance for noise
- Background noise too loud

Inspire Adjustments

- Decrease Overall Output
- Verify Adaptive Directionality is enabled via Sound Manager screen
- Enable Directionality Plus via Sound Manager screen
- Set Speech and Noise for More Activity via Sound Manager screen
- Increase Transient Noise via Sound Manager screen

Other Considerations

- If device does not have directional microphones, consider recommending a directional device
- Consider Starkey® Hearing Technologies Remote Control or Mobile App with Comfort Boost engaged to make the Speech in Noise control more aggressive
- Consider use of Starkey Hearing Technologies Remote Microphone + or Mini Remote Microphone to improve signal-to noise ratio
- Consider turning Speech in Noise off for severe-to-profound hearing loss

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Intelligibility

Reports

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

Inspire Adjustments

- Increase Overall Gain at 1000 Hz and/or 1500 Hz
- Set Speech and Noise for Less Activity via Sound Manager screen
- Increase Low Frequency Gain for Streamed Memory

Other Considerations

- Consider a customized TV memory via the Thrive[™] Hearing Control app
- Consider adding a Starkey Hearing Technologies TV streamer
- May need to counsel on fact that poor speech clarity may be due to poor speech discrimination

Speech Sounds

Muffled even when in quiet

Inspire Adjustments

- Set Quiet for Less Activity via Sound Manager screen
- Ensure Acuity Immersion Directionality is Off via Sound Manager screen Details link
- Increase Soft and Moderate Gain

Other Considerations

 Quiet adjusts expansion to ensure the hearing aids are quiet in a quiet environment

Streamed Input

Reports

 Streamed input doesn't have enough bass

Reports

External environment is louder than the streamed signal

Inspire Adjustments

- Increase Gain for Low Frequencies
- Increase Output for Low Frequencies

Inspire Adjustments

Mute the hearing aid microphones

Other Considerations

- Consider a customized TV memory via the Thrive app
- Consider adding a Starkey Hearing Technologies TV streamer

Other Considerations

 Consider adjusting the streamed vs microphone input ratio via the Thrive app

Loudness

Overall Too Loud

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

Inspire 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

Loudness Comfort

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

Inspire Adjustments

- Decrease High Frequency Loud Gain
- Decrease Overall Output
- Decrease Overall Loud Gain
- Set Machine Noise for More Activity via Sound Manager screen

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

Other Considerations

- Ensure Best Fit is using e-STAT fitting formula
- 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

Overall Too Soft

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

Inspire Adjustments

- Increase Overall Gain
- Increase Overall Output
- Increase Overall Soft Gain
- Increase Overall Moderate Gain
- Increase Low Frequency Overall Gain
- Set Quiet for Less Activity via Sound Manager screen

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 to ensure the hearing aids are quiet in a quiet environment

Sound Quality

Noisy

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

Inspire Adjustments

- Set Quiet for More Activity via Sound Manager screen
- Decrease Soft Gain at 750 Hz and below
- Decrease Overall Soft Gain

Other Considerations

 Quiet adjusts expansion to ensure the hearing aids are quiet in a quiet environment

Pumping

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

Inspire Adjustments

- Increase Overall Loud Gain
- Set Machine Noise for Less Activity via Sound Manager screen
- Decrease compression ratios

Other Considerations

- Adjust time constants for Machine Noise, if available, (slower)
- Compression Ratios are increased as the curves move closer together; decreased as the curves move farther apart

Shutting Down

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

Inspire Adjustments

- Increase Overall Gain
- Increase Overall Soft Gain
- Increase Overall Loud Gain
- Set Transient Noise Reduction to Less Activity via Sound Manager screen
- Decrease compression ratios

Other Considerations

 Compression Ratios are increased as the curves move closer together; decreased as the curves move farther apart

Transient Sounds are

Bothersome

Inspire Adjustments

Set Transients for more activity via Sound Manager screen

Other Considerations

Consider turning off for severe-to-profound hearing loss

Transient Sounds are

Too Soft

Inspire Adjustments

Set Transients to less activity via Sound Manager screen

Other Considerations

Consider turning off for severe-to-profound hearing loss

Sound Quality (Continued)

Sounds are

- Hollow
- Muffled

Sounds are

- Sharp
- Tinny

Inspire 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

Inspire 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)

Other Considerations

Increase Vent Size and update Acoustic Options to match hearing aid

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

Music

Background Music

Unable to hear

Inspire Adjustments

Set Music adaptation to a higher strength via Sound Manager screen

Other Considerations

- Consider creating a dedicated Music Memory for improved music sound quality
- Consider use of Starkey Hearing Technologies streaming accessory

Background Music

- Too dominant
- Unexpected fluctuations

Inspire Adjustments

Set Music adaptation to a lower strength via Sound Manager screen

Other Considerations

- Consider creating a dedicated Music Memory for improved music sound quality
- Consider use of Starkey Hearing Technologies streaming accessory

Music Sounds

Music Sounds

 Too tinny in the Music Memory

Inspire Adjustments

- Decrease treble via QuickFit screen
- Increase bass via QuickFit screen

 Too much bass in the Music Memory

Inspire Adjustments

- Decrease bass via QuickFit screen
- Increase treble via QuickFit screen

Other Considerations

- Consider the Fine-Tuning screen for patients who require very discrete frequency specific adjustments
- Consider use of Starkey Hearing Technologies streaming accessory

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Feedback

Hearing Aids

- Whistle
- Chirp

Hearing Aids

Sound warbly with own voice or other inputs

Inspire Adjustments

- Initialize feedback cancellation with hearing aid in the ear
- Reduce Adaptive Feedback Cancellation Sensitivity (High to Low or Low to Off) via the Feedback Cancellation screen
- Reduce Quiet setting
- Reduce Overall Gain

Inspire Adjustments

 Reduce Adaptive Feedback Cancellation Sensitivity (High to Low or Low to Off) via the Feedback Cancellation screen

Other Considerations

- 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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