

Faster. Simpler. Stronger.



Managing Feedback

Acoustic feedback happens when amplified sound escapes from the ear canal and is picked up by the hearing aid microphone and re-amplified. The risk of feedback is usually seen at the higher frequencies with the greatest gain¹.

Feedback Canceller Initialization (FCI)

We recommend running the FCI with the patient wearing the hearing aids, at every first fit and at any time the acoustic options are changed. This process measures the acoustic path of the sound and creates a custom filter that is unique to the patient's ear. Running the FCI without the hearing aids in the patient's ear is not recommended. Where it is not possible to run the FCI, the hearing aid will gradually learn the feedback path after 24 hours of use.

Acoustic Model Optimization (AMO)

When AMO is enabled, the Feedback Canceller Initialization will more accurately measure the patient's acoustic vent, resulting in faster real ear measurement target matches and less adjustments needed².

Strength Settings

Options are available to help clinicians balance sound quality with the strength of feedback cancellation provided. Pro Fit automatically selects the best option (between Strong and Subtle Adaptation) that considers the type of vent selected and the risk of feedback occurring. The static setting option may be enabled when the FCI process is carried out and is recommended for patients with specific lifestyle

environments where there is constant exposure to high frequency repetitive sounds that may be interpreted as feedback (e.g., musicians, health care workers).

Auto Adjust

The Auto Adjust function is designed to help the clinician apply the best strategies to mitigate the risk of feedback from occurring. When selected, the Auto Adjust may make changes to the hearing aid gain settings and/ or adjust the mid-frequency filter settings to reduce the risk of feedback from occurring.

Note: *There is a display mismatch in Pro Fit (version 2024.1.10184) that may show feedback potential in the lower frequencies that does not reflect the patient's real-world experience. This will be resolved in the next scheduled software update. If you see 'feedback potential' or yellow bars and there is no audible feedback, there is no need to make an adjustment.*

Manual Adjust

There are no constraints to the gain settings and they can be manually adjusted, where needed – before or after FCI. The Feedback Canceller will never prohibit gain, but it will alert if feedback may occur.

1. Agnew J. Acoustic feedback and other audible artifacts in hearing AIDS. [1996 Jun]. Trends Amplif, 1(2):45-82. doi: 10.1177/108471389600100202. PMID: 25425855; PMCID: PMC4172233.

2. Micheyl, C., Harijanawala, J., Schepker, H., Woodworth, L., Introwitz-Williams, M., Olson, M. and Iverson, S. (2023) Pro Fit Acoustic Model Optimization: A Better, Faster Fit. Starkey whitepaper.

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