ReSound Smart Fit 1.17: An Introduction

Presenter: Valerie Kedem, AuD

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- [Dr. Valerie Kedem] Well, thank you everybody for coming. It's the top of the hour, so we're gonna go ahead and get started with our course and it's titled ReSound Smart Fit 1.17, An Introduction. My name is Dr. Valerie Kedem, and I'm one of the field training audiologists with GN ReSound. So, today, we're gonna discuss our newest version of our software, which is called ReSound Smart Fit 1.17. If you have it updated from 1.16, or 1.15, or 1.1, wherever you may be, go ahead and get this update done and it's gonna give you a couple different things. A, it's gonna allow you to fit our most current product, which is called ReSound Nexia. And B, we have fine tuned and streamlined some of the features and functionality of the software to make this easier for all of us.

We do have these four learner objectives. After this course, participants will be able to describe the ReSound Smart Fit 1.17 Connection Flow. After this course, participants will be able to discuss new ReSound Smart Fit 1.17 features. After this course, participants will be able to locate and utilize common ReSound Smart Fit 1.7 software features. After this course, participants will be able to perform a first fit using the ReSound Smart Fit 1.17. So, we do have a lot to cover today, but before we get started in the software, I just wanted to make everybody aware that we do have a lot of support for you. We have a customer care team, we have a computer support care team. We have, those of us who are outside in the field, inside sales rep, we even have a remote training team that does remote trainings and remote troubleshooting support from the privacy of their own homes.

So, long story short, please don't hesitate to reach out to any of us if you find that you need something. Now, because this is a software course, we are gonna spend the remainder of our time together here in our software. This is an introduction course, so we are gonna go be going over the basics of the software, the basics of how to get from point A to point B, and I also do recognize that it's quite a bit of information, so feel free to ask those questions if you have them. And that is in the Q and A box that is

available to you. And at the end of our time together today, I will answer them to the best of my ability.

So for this introduction class, I always like to start here on this Noah screen. And even though the software isn't used very often, inside our ReSound Smart Fit icon here, there's actually two different softwares. There's our older generation of software called Aventa and that fit product like the LiNX and the LiNX squared. We haven't had a hearing need in that software being launched since 27, or, yeah, 2017, sorry, I forgot my dates here. So, it's been a while since we've actually utilized that software. It is there for you under this icon in case you have an older generation of hearing aid come through your door. Don't worry, you still have the software that you need already here on your computer.

The second software is what we use day to day and it is referred to as the ReSound Smart Fit software. So, I'm gonna go ahead and click on my icon here, and we are gonna do a live fit. We're gonna try it together here today. So, when we open up our software, this is gonna be the first screen that we come to. This is called our Smart Launcher screen. I know it's called Smart Launcher because if I look at the top left of my screen, it tells me right here. If you're new to Resound, sometimes it's nice to know what pure needs have what features and accessories and things like that. So, underneath here on this bottom, if you look under Family, this is gonna tell you all the different hearing aids you can fit within the ReSound Smart Fit icon, whether that's in the Smart Fit software itself or maybe some of those earlier generations under the ReSound Inventus software.

And my next tab over is Style. And so, maybe you wanna know what custom resound hearing aids have, if I click on Other here, a Telecoil. And so, you've chosen it and it's telling you that you have Quattro hearing aids that are going to give you that Telecoil. And if you get even more curious, it'll tell you all the ITEs, all the custom products that

do have that Telecoil feature, or what other feature that you're looking for. So, I was just like to point that out. If you're just having, wanting to have a little bit more information, it's all located here in the software. Whenever we take a look on the far right, where it says ReSound Smart Fit Connection, there's a dropdown box.

It always defaults to Noahlink Wireless as the programmer, but you do have some other options if you so desire, or if perhaps you need it. For instance, if you fit a ReSound OMNIA completely in the canal, it is not a wireless hearing aid, it's actually a non-wireless hearing aid. So, at that point, we would need to change it to one of these three options in order for the programming to occur. But that's the only one these days that you would need to change the connector for. Now, during a first fit, what I'm gonna do is I'm gonna open up my charger that I had my Resound Nexia Micros in. And I'm now pulling my hearing aids out of the charger, which is going to turn them on and put them into pairing or programming mode.

Now, I'm gonna click this big red button here where it says Connect to ReSound Smart Fit and this is gonna start our fitting process. So our next screen that we're gonna see here is our sign instrument screen. And I just wanted to point out here that we have a feature called Push to Assign. So, if you look here in the middle where my pointer is, there's a little hand with a pointer finger that's letting us know that if you have a ReSound OMNIA rechargeable custom or a ReSound OMNIA RIC, or a ReSound Nexia RIC, that you can use this Push to Assign feature. And it's just that I can push my push buttons on the back of my hearing aids like so, and it's just gonna quickly assign the hearing aids to the right or to the left.

What's nice about having Push to Assign is that if you happen to connect your hearing aids and you have multiple hearing aids popping up here, it's much easier just to push the button on the back of the hearing aid and you don't have to do the beeps and you're not trying to figure out what is what. Now, on the bottom part of my screen here

is this Continue button, on the bottom right, that is gonna be your friend. That is what's gonna move you forward in the software. What's great about the receivers that these hearing aids use, these are called SureFit 3 Receiver, is that they do have an automatic detection function. So that is just meaning you don't have to tell the software what is right and what is left, or what strength of receiver you have, the software just automatically acknowledge that and then connect correctly.

Because we have programmed these hearing aids in the past, we had one audiogram that's in Noah and another one that's been saved in the hearing aids. So, at that point you just need to decide where do I wanna pull this information from, and I'm just gonna pull it from my session here from 12/12 and I'm gonna Reset to Initial Fit. If you're doing a brand new fitting out the box, hearing aids have never been programmed, you will not see that, but if you have programmed them before, then you got to see what it actually looks like in real time. With the launch of 1.17 and with the launch of the ReSound Nexia, which happened to be this fall, one of the updates that we got or additional items that we got is our very first CROS/biCROS system.

So going back to those SureFit 3 Receiver, that automatic detection function is really nice because the software automatically knows which side is the cross and which side is the transmitter and the hearing aid side. Right here on our Physical Property screen, the biggest thing to know is on the bottom where it says Earpiece. So, we do recommend, the software does recommend an earpiece based on the amount of hearing loss that you have, as well as the configuration of the hearing loss that is being presented here. So, that is gonna be represented by this ribbon that's gray, or badge that's gray silver. It'll just default in there for you, but you do have options. You can pick whichever one is gonna work better for your patient.

We do recommend that you tell the software what you have for that earpiece because it will affect the fitting. Specifically, it affects access to some of those low frequencies

running in the background. And for today's purposes, I'm actually gonna change to a Power Dome just so you can see what that looks like. And I'm gonna hit my friend, the Continue button. Next screen for a brand new fitting is our Calibration screen. And I'm finding these names of the screens up here in the top left. This is an important screen and this will auto-populate. It'll automatically come up when you're doing that first fit because we want you to run the calibration because we want every single patient of ReSound hearing aids to have the feedback system activated for their ears individually.

So, I'm gonna go ahead and run the calibration and after this is done, then we know that our patients have feedback protection as they go throughout their day. And I'm gonna hit Calibrate here on the bottom right. And one more time. So, there's a buzz that occurs for the calibration. You can speak in between the buzz from the right ear to the left ear. Sometimes I know that we need to reinstruct our patients. They like to talk sometimes during the calibration process, but it's better if it's a quiet environment, so if you do need to just reinstruct our patients or say something to them, feel confident that you can do that in between the buzz of the left or the right.

So, now what we're looking at is that we performed a calibration and our digital feedback system has been activated for our patient. On the right side you can see that my maximum stable gain curve or my MSG curve, you don't have to remember the name of that, but it does have a name, is not touching my targets. But on the left side, for the left ear, you see that, well, it is actually coming down into my target curves. This is okay, this is not cutting gain. Just because it's touching the targets does not mean that we're just cutting out all that information there. What this is telling us is that, we're happy that you did best practices, we're happy that you have activated the feedback system for this patient and where those, the curve is coming into those lines, they will have feedback protection.

So, this is not a bad thing, it's actually a good thing. The way that our feedback system works is that we do something called phase cancellation. So if you think back to physics and you have something that's equal but opposite, so negative 180 plus positive 180 equals zero. Our feedback system is as such that, if you have breakthrough feedback or these peaks at a multitude of different areas, that could be 3100, 3250, 3378, so forth and so on, the system will acknowledge that and then it'll send out equal but opposite signals to zero it out, phase it out, cancel it out, whatever your brain likes. But this is not bad and it doesn't mean that we're cutting gain. And again, I'm gonna hit Continue.

Once we hit Continue to come off the Calibration page, these hearing aids will automatically unmute themselves, which is a good thing. In previous generations of software, they were muted and I cannot tell you how many times I spent many minutes trying to figure out, why are my hearing aids not working right? Ah, you have to unmute them. So, as we come into the software, this is the first screen that we will be seeing. As a reminder, when we talk about ribbons, we are not completely crazy. What we are referring to is, if I say black ribbon, I'm referring to the top black line, where I have File, Edit, View, Instrument, Fitting, Help. Below my black ribbon is my red ribbon.

My red ribbon's just basically the different screens of the software. As I cruise through my red ribbon screens or my red ribbon options, underneath, there's a white ribbon. The white ribbon options change dependent on which red ribbon screen you happen to be in. So, I always like to mention that because sometimes we were like, I know it was in this white line, I don't know where it's at. Maybe it's on Patient versus Advanced Features. So, just keep on clicking through those red ribbon options until you get or find the feature that you're looking for down below. When we are looking here at this patient profile screen, you don't spend a whole lot of time here, but let's talk about what we have.

So, underneath Prescribed First Fit, you have these three different items. The first is the Target Rule. This Audiogram+ resounds proprietary target rule. If you feel like you need to change it, you can certainly do that right here if you so desire. What's also nice about this software and the way that our target rules work is that nothing will be taken away if you decide, eh, I'm not down for Audiogram+, I actually would prefer NAL-NL2. If that's maybe where you feel more confident at or perhaps you're running real-ear measurements for all of our patients, NAL-NL2 is a recommended target rule to utilize, especially if you're using freestanding real-ear machine, but you can change it to whatever you want.

And all the features in the background of the hearing aid are gonna operate exactly the same, so you're not gonna defeature anything. Next is our Experience Level. So, we have these four different experience levels, we've had them for quite some time, but if you're have any familiarity with this software, you might notice that the first option looks a little bit different. Before 1.17, it was Comfort User. Now, with 1.17 it's referred to as First Time User-Onboarding. So, Comfort is out, First Time User-Onboarding is in. The main thing to know about this particular experience level, is that it has 70% of the gain that you would get from a First Time User and the noise reduction features running in the background are more aggressive.

When you're looking at these different experience levels and you're kind of trying to look at the big picture of what's different, the experience levels are looking at three different parameters. So, they're looking at how much gain are we gonna be applying out the gate to this fitting? How much high frequency emphasis will we be applying out the gate for this fit? And how much compression? So, our First Time Users are gonna have less gain, less highs, more compression. First Time User-Onboarding is going to have 30% less gain than First Time User, or 70% of the gain at First Time User, whatever sounds better or feels better to you. Experienced-Non-linear and Experienced-Linear, they are going to have more gain, more highs, less compression.

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When you're using First Time User-Onboarding, this is gonna be for somebody who probably needs to put their toes in the shallow end of a pool. You know, they're just kind of struggling with the audibility, maybe it's always just too loud, and we want to give them an easy entrance into wearing hearing aids. We want them to accept them. So, First Time User-Onboarding will be your friend for that. We also recommend that you take them out a First Time User-Onboarding as soon as you can. Because 70% of First Time User already knowing that the volume and the high frequencies have been reduced is a little bit low. So, we just wanna say, okay, First Time User-Onboarding for that first week, or two, or month.

And then, as you see them again to try and take them out and put them into First Time User. Experience-Non-Linear is for somebody who's an experienced hearing aid user. And Experienced-Linear is really good for our folks who heart analog fittings or maybe they have a medical ear, so that would be a mixed hearing loss, a conductive hearing loss, they tend to do better with Experienced-Linear. So, I'm gonna go ahead and make that our experienced level. I'm going to go to my bottom right, hit Fit Patient. And I just want you to see what our compression is looking like here. And I hit that Save button, so we're gonna save this fit real fast and then we'll go right back into the software.

All right, so if you ever happen to do that, just hit Continue Fitting once the save happens and you'll go right back into that software. So as we were talking about, this is your Experience-Linear fit, but we still have compression. It's just a little bit tighter than what we might have in Experience-Non-Linear. Underneath Experience Levels, we also have our Gain Level Percentage. So, you have a percentage from 60 to 110% for every single experience level. So, if I do Experienced-Linear, and I do my dropdown for Gain Level Percentages, I also have all of those options. All Gain Level Percentage is doing is taking the gain or the volume of the hearing aids up or down by 10% increments.

This is it, that's a sole purpose in life. Some people like to go up and down in 10% increments, that's great, you can do it here. When you're talking about your experience levels, those are more sophisticated as we talked about earlier because they're looking at those three parameters of gain, high frequencies and compression. Since we're on this Patient screen here, if you need to do in-situ fitting, this is where you're gonna be able to find that. Because we actually have hearing aids attached to the software, connected to the software, this is active. And that is just to change the experience level, that indicator that we're looking at. Doing in-situ is very, very easy. You're basically just gonna click on the screen and follow your prompts.

So, you do a quick screening here and if you wanna apply your thresholds, you're able to do that within this software. I typically recommend using in-situ when you have a fitting that is not going as well as you think it is. And you're not exactly sure what's going on. Even sometimes after people run real-ear, you're like, yeah, these targets are good, sometimes it's just not what you think it should be. So, sometimes in-situ can help alleviate some of those issues. I really don't use it very often. It doesn't come up very, very often, but from time to time it does and it's gonna be located under your Patient screen here. Our next option is Data Logging.

And these hearing aids are not gonna have any data logging that we have connected, but this is where you can just get an idea of, well, how many hours a day is my patient wearing them? The type of different environments are they in? How often are their microphones patterns changing from directional to asymmetrical to omni? So, this is just giving you a really nice snapshot of what the day-to-day looks like for your patient. Sometimes I feel like this helps get to a better place since I feel like I'll say something, that my patient's saying something, we're saying the same things, but maybe not the same words, so this could help us out. And then, last underneath here is ReSound Assist.

ReSound Assist is our remote fine tuning feature that has been around in some form or functions since 2017. We do have two versions of it. One's an asynchronous version and the other is a synchronous version. So, what asynchronous means is it is gonna be patient-driven. The patient will open up their Smart 3D app, they're gonna send you a request like, hey, I need an outdoor program. You get an email as the provider and then you can come right into the software, add that outdoor program, hit Save, hit Send, and it'll pop up onto their app and they download from there. The Resound Assist Live or the synchronous version of ReSound Assist is going to actually be a real time fit, a live fitting within the software that we're looking at right now.

And you basically just need this software, those hearing aids and a smartphone with ReSound, the Smart 3D app on it. And then, you'll do that live connection with a video and audio phone call and patient will be able to hear realtime changes as you go through. But that is where you will find this if you so need it in the software. Our next red ribbon option is Instrument Set-up. So, if you, again, have any familiarity with the Resound software, you may have noticed that Calibration isn't on the left side anymore at the bottom. Calibration has been moved to here. I feel like that's important to know because from time to time we might need to recalibrate the hearing aids.

And we have no clue where it's at, we won't be able to do it. Sometimes when they go out for a repair, they come back. If they're feeding back all of a sudden, I always recommend just rerunning that calibration to activate it again. But you will find this under Instrument Set-up now. Under Physical Properties here, maybe you need to change the earpiece. This is where you could also tell the software that, oh, you know what, actually, I went from a Power Dome to a Tool Dome. And we wanna make sure that the software knows what we have at the end of those hearing aids. Lastly under Instrument Set-up is Details. There we go. And so, here, this is just gonna give us a rundown of what we've got going on for this hearing aid.

It is specific to whatever hearing aid you have connected to the software. So, you got your fitting ranges with your hearing loss, specific features of the hearing aid itself, and your specifications as well. You won't be spending a lot of time in the Patient screen or the Instrument Set-up screen. A screen that you will spend a little bit more time in or hopefully quite a lot more time in, it's gonna be our Gain Adjustment screen. So, I like to call this our meat and potatoes page because, again, this is where we're gonna spend most of our time. When we're talking about gain adjustments in general, what we're trying to do with the software is lump or clump everything together based on its function.

So, underneath Gain Adjustments, these options that we see, Fine Tuning, Environmental Optimizer II, AutoREM, Acceptance Manager, their sole job in life is to make these hearing aids louder or softer overall. So, maybe your patient comes in and they're like, hey, everything is too loud or everything is too soft. Cool, you can change that two different ways here on this screen. If everything is too loud or soft and you want what I like to refer to as old-schooling it, you can come here and click on All. All of the frequencies and gain values are going to become gray. That means it's active. And then here in the middle, we have one, two, and three. This is talking about the decibels that you can go up or down in.

So, maybe the patient's like, eh, it feels pretty loud all day long. I might just hit on my three here, and hit the down button, and then it's going to reduce my overall gain by three decibels. And of course, you could maybe, maybe it needs a little bit more, so we can go down by five at the point. So, I did two plus 3 equals 5. Underneath our one, two and three dB gain changes, are these arrows. This is undo and redo. Now, they are both black right now, meaning that they're active, meaning that we have something that we could undo as well as something that we could redo. Once you've gone and run out of undoes and redos, they will gray out.

Just to let you know, hey, there's nothing else we can do right now. Now, another way that you can change the overall gain of the hearing aid is something that we've actually talked about under the Patient Profile screen. And that is up here in the middle where my pointer is, under the Gain Percentage. So, it's the same as that function as what we were looking at that patient profile screen did. Feature underneath your, underneath your different experience levels. So, I'll go back to it so you can see. This right here, it's the same as over here on a Gain Adjustment screen. So maybe your patient's like, hey, everything is too loud or too soft and you prefer to go up and down in 10% increments.

This is where you can do that, here at your Gain Adjustment screen. Maybe it needs to be at 90%. It doesn't matter which way you do it. All roads lead to Rome as long as the patient is satisfied with the overall sound quality and the volume, it doesn't matter, each is fine. If you have fine tuning gain adjustments that you need to do, everything's too sharp or maybe it's too boomy and you just need to kind of tweak some of these, you would do it here where my pointer is and as I'm sliding. So, you can do it individually, you could do maybe only 2000 hertz. You can change your NPOs, et cetera. And if for some reason you need to do something with your compression ratios, you can't manually do that.

So, you just can't click on compression ratios and make a change. The way that you can affect your compression ratios is I like to go into my gain 80, which is right here, and I like to increase it and that will decrease your compression ratios. Usually that's what I'm doing is decreasing my compression ratios. I don't really like anything two and over. It's better to do it from the bottom here. And increase those gain eighties, I feel like from the top, because this is your gain 50, so your soft sounds, because then you have to delete or take away some of that volume. It does the same thing, but we usually don't wanna take away those soft inputs.

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When we're looking here in this middle black line, these is, this is the line that our programs show up in. So, our software defaults to program number one, All-Around. And program number two, which is referred to Hear in Noise. Any program that's meant for noise reduction in this software right now is going to be called Hear in Noise. We want you and we want your patients to look at this program and be like, what's the purpose of the program? Oh, it's so I can hear a noise. You can't change what it's doing in the background and it is doing different things in the background. So, in previous iterations to software, program number two is called One of Three Things, and it was dependent on the level technology that the patient was wearing.

So, if your patient had a level nine, so the premium product, Hear in Noise was called Front Focus. Front Focus is a very aggressive noise reduction feature. I like to call it our restaurant partner on steroids, that would be in level nine. It's still here, but now we just call it Hear in Noise for better clarity and not to be as confusing. We don't always understand what Front Focus is doing. If you have a level seven, it will still say Hear in Noise like we see, but it actually will be operating as ultra focus, which was the predecessor to Front Focus. If you have a level five, the Hear in Noise program is going to be a standard traditional restaurant program.

Hear in Noise will show up here in the software, it'll show up on your triple-click function on your iPhone and the SMART 3D app as well as on that remote control too. Unless you decide that you wanna change the name, and then you can come here to your toolbox, you can manage program names here. Maybe the patient really just likes it, they'd be called Restaurant, and they have the app and you can change it here and hit Save. And even though it remains Hear in Noise in the software, it will show up as Restaurant everywhere else. Within the software, no matter what level of technology you have, five, seven or nine, you can program up to four different options and programs for your patients.

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So, whatever makes you happy. Maybe they need a Hear in Noise, an All-Around, an Outdoor and a music program, this is where you'll be able to do that. And again, it's for five, seven or a nine. There's no difference in the amount of programs you have based on the level of technology. If for some reason your patient comes back and they're like, hey, hey, hey, I don't use program two, three, I don't use program four. I love my Hear in Noise program, my program number two, I want that to be my program number one. Now, you can go about doing that all here with all these carets and these dropdowns, but it can be a little bit time consuming.

The easier, better way in my opinion to make those types of changes is to come over to your toolbox and click on the first option, which is your Reorder Programs option. So, we have everything that we would have on the other screen and this is where you can quickly delete and rearrange these programs. So, he doesn't want three and four anymore, so I'm gonna hit the X and the X. I'm gonna click on Hear in Noise, make sure it's highlighted. And on my arrow I'm gonna click it up, they've switched, I'm gonna hit Apply. So, that is gonna quickly delete program three and four and make program number two, new program number one, and vice versa.

This is also a nice feature to remember to use whenever they come back and say, ah, I think I need to be switched around again. No problem, Reorder Programs, Hear in Noise is now back to program number one, Apply, and you swap it out for me quickly and easily. Some other nice features under our toolbox over here is Recalculate. So, over the years in our Smart Fit software, Recalculate has functioned several different ways. Right now, it's a combination of how it used to be and some several generations ago and then what it was just in 1.16. So, we have these two options here. We can recalculate just for the Gain and MPO or we can recalculate to Reset All Fine Tuning.

Option number two here is what I like to refer to as our mayday mode. So, you've made a bunch of changes, you've done a bunch of fine tuning, you've made a bunch of

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advanced features changes, and it is not going well. At that point, sometimes I personally will just reset to initial fit. This is where you can do that. And it can be just for the one program you're working in, all the programs, right ear only, or left ear only, whatever makes you happy. I'll recalculate everything, so it's like a first fit. And then, we're back to a brand new fitting. Our next option here is AutoRelate. And AutoRelate is just a quick, easy way to make sure that the gain values are the same in all their different programs.

So, what I mean by that is maybe your patients come in and they're like, I really need, I have four programs and I need all my programs to be bumped up, they're all too soft. Now, you can manually come in and make those fine tuning changes, it's not a big deal, or you could just make those changes for gain and your number one program. Go to Tools, hit AutoRelate and we're saying, Hey, I want that gain bump up from program one to go to all these other programs here. And then, you can hit both ears and it automatically bumps them up. I don't know how many times, me personally in clinic, whether I'm doing a physicist or whenever I was in clinic putting my own hearing aids, I would know I need to make that gain change across the board and they get talking or distracted and then all of a sudden I've forgotten I had to chase my patient down to make sure they actually had the gain that they needed.

And not only program one, but also programs two, three and four. And then last but not least over here, we already talked about the Managed Program Names, but you can do a copy and a paste function underneath Tools. I personally recommend just to do it through the dropbox. And I can't ever delete the first program, by the way, All-Around. But you can just right click and you can remove programs from here, or you can right click and you can do the copy and the paste function. And it's gonna say, hey, is this what you want? You're like, yes, it is. Next here under Gain Adjustments, so we talked a little bit about the programs and we also talked a little bit about how you would change for complaints of overall volume being too loud or soft.

So, one of the ways is to click on All here, everything's too loud, too soft, and go up or down in your one, two, or three increments. The second way you could do that is your Gain Percentage here. And then, a third way that you can't adjust for the complaint if everything is too loud or too soft is back to our Patient Profile screen with those different experience levels. So, if you've tinkered in here with the gains and it's just not loud enough or it's still too loud, whichever the case may be, that's your clue to come underneath the Patient and to go to your Experience Levels. And then depending on what the complaint is, you'll go up or down one.

So, the software always defaults the First Time User no matter what, unless you change it under Edit Preferences, which we'll look at here in a few minutes. And so, if your patient's like, gosh, it's so loud, I can't handle it, it's too much. It's one of those patients who's who would be in previous generations, a Comfort User, that might be your clue to go to First Time User-Onboarding. And that should be a much more gentle sound, not as much gain, a lot more noise reduction being applied, and that could help your patient adapt to these hearing aids easier. Now, on the flip side of that, maybe you have him at First Time User and you have made some gain changes and they're like, no, it's still too soft, it's still too soft, it's still too soft.

In my head that's actually a good thing. That means that your patient's wearing these hearing aids and they've adapted and their brain can take in more information. So, if that's the case, it's like a month post-it, six months post-it, a year post-it, whatever it may be. Then I'm gonna change him to First Time User. From First Time User to Experience-Non-Linear. And probably at 100% versus 70. So, this is the way, three ways that you can adjust for everything is too loud or everything is too soft. Under our Gain Adjustments page though, we have something called Environmental Optimizer. So, Environmental Optimizer really should be called automatic volume control wheel because that is all that we are doing here.

We are saying that when I go into different environments, wearing my hearing aids, I prefer volume to be different depending on where I'm standing. So, sometimes I might want it louder and sometimes I might want it softer. Sometimes I might want it to stay the same. Oh, and by the way, I want it to happen automatically. That is Environmental Optimizer too. When we're looking at these different environments, all this is describing is that, hey, I've got my hearing aids on and I'm standing in a quiet environment. Hey, I'm wearing my hearing aids, I'm standing in an environment that only has speech. I'm in an environment that has both speech and noise present together, a meeting, a restaurant.

Or I'm in an environment that is noise only. So, our hearing aid brains tend to like to make this more complex than it actually is. When you see the word noise, we are not talking necessarily about background noise, we're just saying that right now it's rush hour traffic in South Florida and I happen to be walking across this big road that is a noise only environment. Speech and noise is saying I have both of those together. Speech is just saying, eh, I've only got speech. Now the reason I'm saying that is our hearing aid brains also when we see the word speech and noise together tend to want to say, oh, we're cutting lows and boosting highs.

We're not doing that. Remembering, Environmental Optimizer II is only increasing or decreasing volume automatically for our patients depending on where they're standing. So, if I am, like, maybe your patient comes in and they're, like, hey, everything sounds good but... That's usually the point that you're gonna hear, everything sounds good but... That might clue you in that Environmental Optimizer will be the best place to go. Everything sounds good, but I watch my granddaughter a couple hours a day, only person I cannot hear. So, they do have a volume complaint, but it's not an all day every day volume complaint. It's a two hour a day volume complaint. So, Environmental

Optimizer, you're gonna pop into. We're gonna make an assumption that the grim baby's a soft speaker.

And we're going to make the volume louder for that moment in time. When I pull my sliders to the right or the left, pay attention up here where my pointer is, you're gonna see a flashy thing. That is just to remind us that we're literally turning the volume up from 250 to 8K across the board, that's it, volume up, volume down. Environmental Optimizers is a really nice tool to use because it should eliminate or greatly reduce that back and forth that you sometimes end up in. Patient comes in, they've got a moment in time. Volume complaint, you make a global change. Maybe you boosted highs a little bit to help with a speech understanding, which is perfectly fine.

And then they come back in in a week and say, I can hear my granddaughter awesome. What? Now my newspaper's too sharp, my dog walks across the tile, that's too tinny. When my plate hits the fork, it's too much. So, you created one problem while fixing another. Environmental Optimizer eliminate a lot of that back and forth. These numbers that you see here are actually representative of decibels. So, we're saying, we're gonna go up two dB automatically when I walk into a quiet environment. The way that we got these default settings for every hearing loss, for every hearing aid, is that we put about 900 people in hearing aids, let them wear them for a week, ran their data logging and said, on average, when I walk into a speech loud environment, I increased the volume of my hearing aids by two decibels.

On average when I stand out on the side of the road during rush hour traffic, I decrease the volume of my hearing aids by two dB. The last thing I'll say about Environmental Optimizer II, AKA automatic volume control wheel, is that it takes a second per decibel change, so we really wanna try from line to line to line. So, I mean, from quiet to speech soft to speech loud, we wanna try and keep these within two or three DB of each other. Not because it's wrong to have a bigger between each other, but because if I have

negative six and positive six, that's a 12 second delay. And your patient will notice a 12 second delay. And they will come back in and say, hey, my hearing aids are acting wonky, they're pumping, they're turning off when I walk from room A to room B.

I just don't know what's going on. If you ever hear that complaint, check Environmental Optimizer. AutoREM, that would be active if you happen to have a real-ear machine attached to your computer. When you hover over AutoREM and update in this software is that you get to see everything that is compatible, which is always nice. And the last under our Gain Adjustments tab is Acceptance Manager. So, this is just, you want the volume of the hearing aid to be some one place, your patient's having none of it, and you want the gain to increase a little bit by little bit by little bit. So, you can set it to where the patient's happy, knowing that you're gonna end up where you're happy and you have a wide range of duration.

So, four weeks, one week, six months, just remember patient needs to wear their hearing aids and have them on for eight hours a day in order for that gain to move forward. Under our Advanced Features tab, this might look a little bit different as well. I think we're trying to make this software easier, more intuitive. So, whether you've used ReSound for a long time, you have not used them for a long time, you've never fit a hearing aid ever, that within just opening up the software, you can kind of go through a first fit and feel like you made it happen. So, underneath advanced features, just like what we had under Gain Adjustments, all the things under Gain Adjustments are made for increasing or decreasing the volume of the hearing aid.

Under Advanced Features, we have moved more advanced features under here. For instance, the Tinnitus Sound Generator, that is an advanced feature, is now under the Advanced Features tab. With Nexia, we did launch that CROS/biCROS system. This is where you can do some balance control. Underneath here, it'll be active if you happen to have that cross system connected to the software. And we've also now broken out

those advanced features in between their functions. So, if it's meant for speech, it will be underneath the Speech tab. If this feature is meant for comfort, then it will be under the Comfort tab. This makes sense, right? DFS Ultra III, that is our feedback system. Digital Feedback System Ultra III is made for comfort.

Once you've run the calibration and activated this system, it will always default to mild. With the exception of one advanced feature, which happens to be under Speech, anything that you see bolded for these features is the default setting. If for some reason you have that breakthrough feedback, you can make the system stronger. And by stronger I mean more sensitive. So, it's gonna wanna classify, more sounds in the environment is potential feedback. So, for mild to moderate and moderate strong, we're making the system more sensitive, more classification of feedback. Music will be the least sensitive. Music's on vacation, it doesn't wanna be very sensitive. And we don't want the music to be very sensitive because if your patient's hanging out at a place with singing and a lot of musical instruments, we don't want the hearing aid to be squirrelly all the time.

If you have your DFS on strong and your patient comes back to you and says, when I sing, my hearing aid sings, that's entrainment. And it's because the hearing aid is classifying that sound as feedback and remembering you send out a signal that's equal but opposite, it's doing its job. So, it's sending out that equal but opposite signal to zap out the microwave beeps, or maybe the alarm beeps, or maybe your voice. So, yeah, that could happen. That's why I try to recommend staying off strong if you can. Every once in a while you'll get that complaint and at least you know what it is. Just to quickly kind of explain this how it was explained to me, mild is like, oh, hey, hey, hey, you look like feedback, you sound like feedback.

Cool, I'm gonna do my thing. Moderate is a little more aggressive. Moderate's like, oh, hey, how you doing? You look like feedback, you sound like feedback. Let's do our

thing. Strong has had way too many Red Bulls with a mixture of coffee for the day and it's only eight o'clock in the morning. Strong loves to do its job. So it's like, hey, hey, look at I'm gonna do my thing. Music is on the beach with its beach chair and its magazines and drinks and snacks is ready to go. Beach chair is perfectly positioned. Music's gonna be like, oh, hey man, you look like feedback. You sound like feedback. Are you sure your feedback? Okay, fine, I'll do my thing.

So, like I said, very technical here. Don't usually have to tinker with this too, too much, but it is here for your needs. Noise Tracker II is gonna be your noise reduction feature. It does become more sophisticated as you go up into technology. And when I say more sophisticated, actually what I mean is that you have more options as you go from a level five to a seven and a nine. And a level five, you will have the noise checker feature of Mild and Moderate noise reduction. And a seven, you add Considerable, and the nine you add Strong. And this thing called Per Environment. If these environments look familiar to you, you are correct. They're the same environments that you have for Environmental Optimizer II.

So, now, with Noise Tracker II, this is the thing that we're talking about, background noise. So, I've got my hearing aids on and I'm standing in a quiet environment. I'm gonna have two dB of noise reduction applied versus if I'm standing out on the side of the road, rush hour, I'd probably want more noise reduction. And right now it's gonna be 70. So, this just allows you seven different independent environments to control background noise. This is all about background noise, background noise, background noise. I go to my Gain Adjustments page one more time and I go back to Environmental Optimizer. This is gonna look very, very similar, but this is all about gain volume, volume, volume at a moment in time.

Wind guard is wind guard, so it will be in, like, a sleep mode until three parameters are met all at the same time and asymmetry between the front and the back mic, so that's

like a turbulence, if you'll. It has to be the right volume and it has to be the right frequency. So, once all that combines together, Wind Guard will turn itself on. Impulse Noise Reduction, loud set of sounds, tees dropping, doors slamming. Expansion, that is gonna be for soft environmental sound. Maybe all of a sudden once a patient has these hearing aids in, they can hear a hum in their room that they've never heard, or they can hear their computer running, or maybe their refrigerator running, or maybe their fan, they can hear the motor.

So, if that's the complaint that you get, Expansion will be your friend for that as well. Underneath our Advanced Feature's Speech, this is about making speech better for our patients. Directionality, it's just saying, what is my microphone pattern doing right now? You have some options here. Omni's Omni, Soft Switching is going back and forth between omnidirectional automatically. 360 All-Around is the most sophisticated. It's doing four automatic microphone patterns. And then, Spatial Sense is omnidirectional fixed, but with some included in there, average . All of our advanced features have a video associated with them. You can find them a couple different ways. If you see these little eyes and you hover over it, it'll give you that blurb of what the function of the feature is.

And if you click on it, it also gives you a video. So, this is Directional Mix. This is our crossover feature. How much omni versus directional processing is gonna happen. And this is gonna be picked by the software and it's gonna be based on the hearing loss and the touch of hearing patient's wearing. You might notice that there is a little microphone here. I can look like I'm unmuting it. It doesn't mute or unmute because there is no audio to any of these videos in the software. If you wanna see all the videos in the software, if you click on Help up here, my black ribbon, and my fourth option down is Feature Demonstrations. There's this cheat sheet inside the software that has every single feature that's associated with whatever hearing aids you have programming or connected to these, the software.

So, when we're talking about directionality and you're thinking about the fanciest directionality, no matter which level of technology that you have, five, seven, or nine, just know that the hearing aids are gonna be cruising through these four automatic microphone patterns. So, both hearing aids are in omni and a quiet environment. When the signal to noise ratio changes or maybe noise moves to a different spot, or speed moves a different spot, then the hearing aids will go to asymmetrical microphone pattern. One's in directional, one's in omni, and it'll switch automatically. And then, as that environment gets noisier, more intense, the hearing aids will automatically go to directional. Just know this is all happening in the background for all levels of technology.

As you go up from a five, seven or a nine, of course, it will become more sophisticated. But if you see 360 All-Around, all access by no directionality, three most spatial sense, it's doing this for microphone patterns. Time Constants are your attacking release times. We see these utilized for folks who have constant chronic complaints of harsh, sharp 10, you can slow them down. We also slow them down for folks with poor word recognition, bigger hearing losses, cognitive issues. Time constants set a slower rate, tend to do a little bit better for our patients. And then, we have Sound Shaper, which is our frequency compression. This is the one feature that will always be in the off position.

We will never ever turn it on. Software will never automatically turn it on. But if the software's like this, hearing loss might benefit from Sound Shaper being turned on. It'll bold it as a recommendation, but it'll never, ever turn it on. You have to manually do that. Sound Shaper again is our frequency lowering feature. And it's gonna just smush it down into the area of audibility here. So, it'll always be an off, but the software might say, hey, Val, why don't you try my app? Device Controls is also where a lot of our updates or changes in the software have occurred. So, the biggest one so far is that

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you're now calling program number two Hear in Noise, that Comfort Users out and First Time User-Onboarding is in.

And then, we've added some things under our Device Controls here. Under Device Controls is Manuals Controls, you will note that you now have the ability in the software to disable or enable the Hands Free function. So, if the patient doesn't wanna answer it in the phone calls on the back of their hearing aid, that's cool, you can just disable it here. Also, with the Nexia micro hearings aid, we've also added Tap Control. So Tap Control, they can tap, tap their ear when there's a phone call coming in, only then deactivates itself and to answer those calls, but you can also disable it and enable it here as well. In previous generations of software, if you had a monaural fit, there was no way to make it volume up and volume down utilizing the push button.

But because we do have that cross option now, we had to have a way to do volume up and volume down, or cross balance. Up or cross balance, down. So, now, you can make the push button for monaural fit, the volume up and volume down together. So, those are the three changes here under Device Control, Manual Controls. Standard Beeps, so this is where we're gonna be able to demonstrate any and all the beeps that are in the product. And we've also moved Accessories under here to Device Controls. So, if you're looking for accessories and maybe you want to increase or decrease the bass boost here, or maybe you wanna pair your accessories to a software, this is where you're gonna do it, under Device Controls now.

Finalize is if you wanna save here, you're more than welcome to. You don't have to save it here. You do have a couple different reports that are nice. You have a Clinician Report for yourself that you can print directly from here. As well as a Patient Report. I like the Patient Report because it is specific to your patient. The user guide is more universal, but this is gonna be exactly what your patients have. It's got some troubleshooting in it. This tell patient exactly what all the push buttons are, what type of

programs they have. And then, we're right at the end of our time here, but I also like to go back to just demonstrate what a first fit looks like.

So, I'm gonna put my hearing aids back in the charger. I'm gonna exit out of my software here. And then, we're gonna come back into the software and walk through a first fit with no interruptions, so you have a really good idea of what that connection flow looks like. So, I'm gonna click over here onto my Noah. I'm gonna pull it up. The patient, click on the ReSound Smart Fit icon. I'm gonna pull my hearing aids out my charger. And once we get into the software, we will do a Push to Assign. We'll run our calibration, we'll demonstrate the low battery warning and hit Save. And then, we will be done with this fit. And again, we're trying to make it easy for you all, so you don't have to spend most of your time fitting the hearing aids, that instead you can fit, spend the rest of your time with your patients, making sure they can get those hearing aids in and out of their ears and just feel confident and comfortable with it.

So, I'm gonna hit Connect to ReSound Smart Fit. We have our SureFit 3 Receivers, which will do this automatic detection process. You don't have to tell the software anything about what you have attached to the hearing aid. I'm gonna hit Push to Assign. I'm gonna hit Continue. I just gonna wanna make sure that we tell the software, which earpiece we do have on these hearing aids, so we have access to those flows if we need them. Okay? And we'll be running the calibration here. Remembering that you can talk between the buzz. We're gonna do it one more time in the left here. And we do wanna make sure that we do the calibration process with the hearing aids inside the patient's ear.

Once this gets to the end, we're gonna hit Continue. Our hearing aids are unmuting themselves. And we're now on our Patient, Data Logging screen. So, I'm gonna come back in here to Gain Adjustments. I'm gonna make sure that the sound quality is good for my patient. I'm gonna go to Device Controls. I'm going to demonstrate under

Standard Beeps. My low battery warning, which by the way sounds a little bit like Beethoven's Symphony. But that is good for the patient, I'm gonna hit say Save. This is if I have my Orderly as a reminder, I like Orderly, I want to remind myself to use it. And I'm hitting Save. And then, in just a moment, we're gonna be done with it.

So, very easy to do, very, very quick. It flows really nicely. That is what we have time for today. I just wanna say thank everybody for coming. I hope that you feel more confident with this introduction to the Smart Fit 1.17 software. Please don't forget to take your five-question quiz. You can get your one hour of CEU with audiology online. Thank you and have a wonderful day.