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CONNEXX Made Simple: A Tour of the Signia Fitting Software

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Hello and thank you for joining. connect made simple a tour of the Signia fitting software on audiology online my name is Lisa Perhacs, and I'm part of the professional education team here at Signia. Before we start, I'd like to cover just a few of the common questions that usually come up during the webinar. Most importantly, how do you earn the ceus? Well, very simple.

Watch the course, and after the course, go to your pending courses on audiology online and pass the multiple choice exam. Remember, though, you must have a paid membership in order to earn the ceus on audiology online. If you need assistance during this webinar or tech support as we go along, please call 807 532160 or you can email customerexperience@continued.com you're going to learn so much during this webinar. When we're done, you're going to be able to describe and perform the simple steps to complete a first fit with a signia hearing aid. You're also going to be able to list the steps and benefits of running OwnVoice processing 2.0, and you're going to be able to discuss how the flexibility of the dynamic soundscape processing 3.0 can enrich the real time conversation enhancement adjustments.

Before we go into the software, I just want to take a few moments to talk about the Signia integrated experience technology with real time conversation enhancement. Signia IX is groundBreaking. It is revolutionary. Three pillared process that's working simultaneously, in which the hearing aid is analyzing and augmenting and adapting all at the same time. It's able to tell what environment you're in, who's talking, where are they talking from, are they taking turns?

Are they talking on top of each other? All of what's going on in this multi speaker environment, even with all the noise in the background. Because Signia IX technology is sampling the environment 192,000 times a second and then taking that information and adapting a thousand times a second. So what you hear is in real time. The Signia IX technology forms a live auditory space in which it's able to pick out the speakers and adapt and modify along as the speaker is moving around without the listener having to look at who is talking.

So you can just sit back and relax and follow the conversation with this multi stream architecture seamlessly, that you don't have to be actively participating and following every word you hear the conversation. Because the hearing aids with IX technology are able to pick out these multiple talkers in real time, all without you having to look at who is speaking, immersing yourself in the surrounding sound while still understanding every bit of the conversation of multiple speakers. Which is really the most difficult task for anyone with a hearing loss, is when everybody all talks at once. Signia IX technology changes the game and gives you that advantage of following that multiple speaker talk in real time. Our signia portfolio is quite large and we've got a lot on the iX platform to fit every one of your patients needs and to fit their individual hearing loss, their style, their need.

We have an instrument to fit your patients. And what we've just introduced on the IX platform is the essential line. So we now have IX available in every single price point. What we also have is brand new, the Intuos four. It's a battery driven premium BTE built on your split processing platform.

So with the intuos four, you have an M A P and a superpower that's able to handle profound hearing losses. That has a zinc air battery, that's a premium split processing technology. So with Signia, you have it all. Let's go ahead and jump into our software. You were using our Connex 9.12 software, so to want to make sure you have that, you've done your update manager.

You've got the most recent software, and you can tell when you open up the software, make sure it says 9.12. And you want to make sure you have this because there is a firmware update in 9.12 that's going to have your hearing aids working better, more effectively, more efficiently, and most importantly, better connect. Because with 9.12, with that firmware update on an IX hearing aid, you will now have Bluetooth Le audio. So that's a firmware you don't want to miss. Make sure you're updating your firmware with your 9.12 software.

So let's go ahead and jump right into the software. Let's open it up. And what you see now is the homepage. Homepage may look a little different for you than it does for me. I'm using standalone.

That's why I have a client list as my first icon. That client list is integrated into NOAA. So if you're using your NOAA databasetase, you don't have the client list icon. It's all part of NOAA. And what you have when you open signia are the three icons, the audiogramme detect hearing aids and the hearing loss simulator.

It's all the same once we get past this point. So I've loaded in my patient. Let me show you the audiogramme. I'm going to go ahead and click on the audiogramme up on top. Same thing as if I clicked in the middle.

And you'll see very typical audiogramme that I put in a little bit different between the ears. And I did that on purpose because I want to show you something, but your typical presbycusis, high frequency hearing loss for the most part. Let's go into our hearing aids tablet on the top right to the right of audiogramme. And this is my counseling page. This is where I'm going to try figure out what's the best instrument for my patient for their needs.

And I could narrow it down. I could look at just the slim ricks. That's your Styletto I could look at just BTEs that might be our new into his four. I might want to look at just my custom. It is.

That would be my NCO. But I'm going to go back to my ricks. And in my ricks I'm going to look at my pure charge and go is, which is right here. And I'm going to scroll down a bit because I want to go to the pure charge and go TIS. I love the TIS.

It's got a telecoil and up to 39 hours on a single charge. So I know this baby is going to last the entire day, even if I'm streaming all day as well. And it's small in size. I love my pure charging go TIS. So

we're going to use that one and we're going to look at different strengths of receivers.

Now I'm going to make my graph bigger so you can see it. I'm going to click on the little magnifying glasses in the bottom right hand corner so you can see better. Our fitting range. The fitting range is, what we're looking at is in that dark gray. And here is my s receiver.

This is a 46 peak gain receiver. Looks like a pretty good fit to me. Here is my m receiver. This is a 60 gain receiver. Also looks like a pretty good fit p receiver.

65 peak gain. A little too strong for this GUI. 75 gain receiver. And my high powered receiver, way too strong. So I'm going to go back to my s and my m's and I'm doing this on purpose.

I want to show you s and M. Okay, let's go back to my s. A lot of people do like to choose two of the same receiver. So some people might choose two of the s's for this patient. Some people might choose two of the m's for this patient.

And some people might choose one in one. Maybe they'll do an s and an m. What is the best choice? What would you do? Well, let me tell you what we absolutely recommend that you do.

The old way of thinking, which was fit them with them. You can always turn it down. They'll grow into it was back when technology was not very advanced. Technology is so much better nowadays. It has a clear sound quality, it's crisp, you hear all the nuances of speech.

You're able to immerse yourself in your environment. You're going to hear if you're overpowering that patient, it will not sound good. It'll have some sort of an artifact or distortion that you won't be able to programme out of. Do not overfit the patient. So if we look at that right ear, the right ear would be a good candidate for MH.

The s is a great option. For the left ear. I certainly wouldn't do both right and left with an s. I think it's a little, just a hair too weak for that right ear. In those mid to high frequencies, you're going to want more headroom.

There's a chance you might get feedback if you over amplify what that receiver could possibly do. So for that right ear, I would certainly do the MH. For the left ear, I would do the s. And then if it changes as time goes on, you can always adapt later on, but I would certainly make sure you're fitting the hearing loss. That's the most important thing you can do.

So I wanted to show you that. What I also wanted to show you from this page is this is a wonderful page that you'll use for counseling your patient, but also to find out some information for you if you wanted to see if their phone was compatible. The link is right here. It'll give you feature overviews. It'll tell you about the platform under product details.

If you click on that little tablet there, you can see the different colors the instrument comes in, the accessories it works with, as well as your spec sheet. Your data sheet is in that top right hand corner, right on top. So I love this page as far as finding out any of the real nitty gritty that you need to know to get the right product for your patient. And you can also simulate the fit. So if you clicked on simulate, you can actually pretend that they're connected and do everything within the software.

And if you uncouple right and left, you could pick different aids for right and left ear. So that's a option too. As well. I'm going to keep them coupled together and I'm going to read out my hearing aids. So to read out your hearing aids, you need to put the hearing aids in discovery mode.

Okay. So that's important to know. To put them in discovery mode, that means freshly put on. So either drop them in the charger or take them out or open and close the battery door or hold down that rocker

switch, whatever you need to do to turn them on. You want to freshly put them on.

They're in discovery mode for about three minutes. And that's when you can read them out with your no link wireless. Once you take them out of the charger or put them on, remember, there's about a six second delay, so give it a few moments before you read it out. To read out the instruments. It's the Bte with the Green Arrow.

That's right on top that I'm pointing at. Or if you were in your homepage, it's the same icon but bigger. The one in the middle, the Bte with the Green arrow. So just click on that and that's going to read out your hearing aid. So we're going ahead and we're reading out our hearing aids.

And if this is a brand new set, it would not be marked right or left. But I programmed this already before, which is why it remembers which one's right, which one's left. If this was hearing aids, you just got in really simple way to tell right from left. Hold the right one up to your ear and play the little speaker here and I'll play a musical tone. If you hear that musical tone, congrats.

The right ear is the right ear and you mark it as the right ear. But if you played that musical tone and you held the right up to your ear and you heard nothing, then the one you're holding in your ear is the left ear. So easy. The right ear is the other one. So easy.

Easy. New fitting. We're going to do new fitting right here. Click on. Ok.

And it's going to go ahead and automatically connect.

So here we go.

Awesome. Connected our hearing aids. So once they are connected, it opens up to our first fit page. First fit page is really simple. There's only a few things you have to do.

Let me explain to you what you're looking at. And first and first, this is new connect 9.12. Software will now show you the battery strength of the hearing aids that you have connected. So if the hearing aids are almost dead, you're going to see it right up top there. Mine are fully charged.

That's why I have a green straight across. So this is a new feature in the 9.12. And if you had to update the firmware, it would be right in the top right hand corner. There would be something that would pop up and tell you to update your firmware. You would see that.

So it would be really easy to know what you're looking at. At your graph is all in gain. We're looking at the black line is the hearing aid. The gray around it is the volume control. And that hearing aid that's right here at the bottom is not matching your targets.

These red and blue lines are your targets. And you would want that black line with the gray around it to be right on top of the red and the blue. If you are matching targets. We're not because we didn't apply first fit yet. You need to apply first fit, and then you'll get a green check mark next to the first fit, and you'll see everything will match.

But before we do that, we have to tell the software a few things. So what we're looking at are our targets. The hearing aids not matching the white is all what's available to use for that hearing aid. As far as gain is concerned, the red and the blue is out of bounds. So what we're looking at here, also in the light pink and the light blue, that's your staTIStical critical gain.

So that's showing you normative data where feedBack could possibly occur. And it could apply a notch there if you wanted to. So we look down at the bottom. There are five tablets along the bottom, and I'll

make your life very easy. For first fit, click on first fit.

This page opens up. You only have to do the first and the last tablet, and then apply the first fit. The first tablet is the one that opens up your acoustical parameters. And for acoustical parameters, you're telling the software what plumbing you're using. You want to make sure you're matching whatever you tell the software is what is on the hearing aids.

So you could. Or using an ear hook or a slim tube, are you using a sleeve, an ear mold? All of that has to be told in the software. And what's really nice is if you're using the sleeves or the tips, it'll show you a little picture. It always defaults to open.

It doesn't mean that that is the preferred or the recommended for that fitting. It's just a default. And to be honest with you, I never use open. I really don't like open. I think you lose too much audibility with open.

If the most open that I do is a semi open, which is my vent or my tulip, I'm going to get a semi open response from tulip and from vent. When to do one over the other, I really base it on the wax that's in the patient's ear. If they've got a little bit of wax in their ear, I go with the vent hands down because that's going to give a little bit more protection over that wrist. Receiver opening. And when you look at the vent versus the closed versus the power, you may say they look identical.

I can't tell the difference. Trust me, there is a difference right there at that receiver opening. The vent has four different openings. It's all vent, making it a semi open. At the receiver opening.

For the close, there's just a pressure vent. At the receiver opening of power. There is no venting. So there is a difference. They all come in the same sizes, which is why the picture looks kind of the same.

It's extra small, small, medium, or large. But vent is clearly a semi open closed, just as a pressure vent. And power is completely no venting whatsoever. Okay, so I like to choose. I'm gonna choose my vent do both right and left ear.

So let's go ahead and choose vent and then skip everything in the middle and go right to the end. So you're going to skip the in situation gramme. You don't have to do that to get a great fit. That's the hearing test in situation. You're going to skip the feedBack test and absolutely skip this because you don't need it.

And we've been telling you this for, like, 15 years now. Our feedBack system is automatic, it's adaptive. There's no need to set any parameters. This is a secondary feedBack system. This is a last resort.

You really should never have to use this because this is going to take the measurement in situation, see where feedBack could possibly occur, and apply a notch. You don't need a notch. A notch makes you lose audibility. Our technology, again, is very, very advanced. Our feedBack system is even more advanced.

The feedBack system is doing a three pronged system, automatic, adaptive. You don't need to set any parameters. It's doing this three pronged approach in every channel, following the feedBack path of each microphone, on each ear, in each of the processors. Because, remember, we have split processing. It is accurate, it is very good.

It is very stable. If you're going to get feedBack with our system, it's probably because you have the wrong receiver on the ear. Like we said, if you chose an s when you really needed an M, or if the patient has a ton of wax or has hair in their ear, it's if you fit appropriately, you are not going to get feedBack and you're not going to need this feedBack test, so skip it and the received values, that'll populate in automatically if you are using the auto fit and having your verification set already connected.

So you can skip that. So when you're doing a first fit, you do your acoustic parameters and your fitting formula, and fitting formula is really easy as well.

Fitting formula choose which fitting formula you want to do. I always like to use is fit that is based on NL two. So I'm going to hit my NL two targets. I like isfit because it's been modified for the exact instrument that I'm using. So not only am I hitting targets, it's been optimized for that particular Rick slimrick or custom product whatever that I'm using.

So I like my IX fit, but you have the other straight prescriptives as well as your option. If I chose new, it would be an underfit that's 70% to target, so it's a 30% cut. That's important to know. If I chose experienced, I am 100% to target. If I chose power, I'm more linear, less compression.

So really be cognizant of what you choose, because if you choose new and you're verifying, you're going to complain that Signia doesn't match targets because you chose 70% to target. And what you're trying to match is 100% to target. So make your life easier. If you're verifying, choose experience. That's 100% the target.

Do apples to apples, and that's usually what I always use is experience when I'm doing my first fit. So first fit, all you got to do. First acoustic parameters, last fitting formula, and then click on first fit. A little cog will turn around. And now you're seeing I'm matching my targets.

Everything looks beautiful. I have my green check mark right up there and you'll see first fit turned into recalculate fit. So that's if I'm doing a follow up and I have some new data that I wanted to enter in. Maybe I have a new I'm using. I didn't want to use the vent click sleeves or sleeves anymore.

I want to use closed. Or maybe I have a new audiogramme recalculate keeps my programmes, keeps everything that I've done and just recalculates on the new information from this page. Let's say my

audiogramme changed. Let me go back to my audiogramme. So now I want to make my right, my left ear the same.

Maybe this was an annual, and maybe both ears have changed a little bit. Whatever the case, your audiogramme has changed for whatever reason. When I go to my fitting and I have a new audiogramme in for this patient, you're going to see, you have a little question mark up here with the audiogramme. You lost your green check mark because you have to recalculate based on the new information that the software now has. So when I go ahead and click on recalculate, I have options, either override or keep.

Let me give you a little hint. I am absolutely going to override. And this is why 99% of the time, you're going to be overriding. Let's say the patient came in and you, and they complained that the hearing aids just weren't loud enough, so you made it louder, and then they come back again soon after the same complaint. So you make it louder, and they do this three, four, five times over a six month period that you've just made it louder, louder, louder.

So now you're like, you know what? Something is going on, throw them back in the booth, you do a quick airline and find out that their hearing loss has changed. It's gotten worse. So you put the new audiogramme in. If you keep the fine tuning, it's going to keep every time that you made it, louder, louder, louder, louder.

And then apply the new targets on top of that. So you've actually over amplified them. If you override, it wipes out all the times that you adjusted the volume, made it louder, and just puts in the targets for their new hearing loss, what's appropriate for them now. So nine times out of ten, you're doing the override. Why is keep there?

Because there may be that slim possibility that you wanted to keep those changes you made as well. Once you recalculate, you got my green check mark, I'm good to go. I could move on. Once you have your green check mark there, you can put them in your patient's ears. And you certainly want to.

When you're doing own voice processing, this should be part of your first fit. I do it on everybody. So if they've got ricks or BTEs, if they've got two of them, I 100% run own voice processing. Own voice processing lowers the gain just when the patient talks, and not for anything else. Works just on the speech processor and split processing.

It is phenomenal for the patient because it makes their voice more comfortable, but even more phenomenal for you as the provider because you can now fit them to target and you can give them the audibility that they need. So it's a win win. I love running own voice processing. Go to the training and it'll tell you what you need for that room. It needs to be quiet in the room.

Make sure no one's talking. Make sure your patient's not in front of a wall or a high backed chair. They have to be about 3ft away from any reflective surface. I like to say helicopter arms. And the patient doesn't physically have to swing their arms around them.

You could just eyeball them. But if they could swing their arms around them and not touch anything, you know, it's good. You want the patient away from the computer because the interference from the computer monitors can happen. And you want the Noah link wireless pretty close to the patient. Make sure it's not on the floor behind the desk, because what the Noahlink wireless is doing when you're running this training is the hearing aids.

It's doing a very complex connection, and the hearing aids are doing a 3d scan of the patient's head, taking an exact measurement of the distance between the mouth and the ears. So in order to do so, you need the patient to continuously talk. So you tell them, mister patient, I need you to count. And we

say count. So that way the words run together.

But if they count from one, they pause between the numbers and it won't work. It takes about 12 seconds to take this measurement. So have them count with the larger numbers. Start from 21, 22, 23. The numbers run together.

There's no breaks, and that's what works best. So I instruct them, mister patient, I need you to count in a nice loud voice. Starting from 21 on up, you're going to hear the hearing aids cut on and off. That's okay. You're going to hear them beep.

That's okay. Just keep on counting. I will tell you when to stop and then tell them to go ahead and start counting. So we tell them. Patient starts.

2122-2324-2526-2728-2930-3132-3334-35 and see, by the time they get to about 33, 34, 35, they get their green check mark. It's all done. Once it's done, you wouldn't see it on the screen. The black line is the voice. The yellow is the reduction of their voice.

The default is the medium setting. Just to give you an idea, the minimum setting is about a two to three decibels reduction of their voice. The medium, about five or six decibels reduction of their voice. maximum eight or nine decibels reduction of their voice. I like to start everybody at medium at the default, where it defaults to.

And when I instruct the patient and they count, I'm like, okay, all done. I then move on. I don't even ask them how their voice is, because if this is a new patient, they don't know. They don't know what to compare it to. They've just put the hearing aids on and everything is weird and foreign because we're doing this.

At first fit, I want them to wear it for a little while. So at the end of my fitting, so after I run own voice processing, I go, okay, we just trained it for your voice. And I move on and I finish up with the rest of my fitting. I'm talking to the patient and they're like, o, okay. And they just keep on going with you.

At the end of the fitting, I like to then say, okay, everything's good. We're going to leave it where it is. I'll see you in a couple of weeks, yada yada, and go on from there. I never address their voice directly. If the patient brings it up at that time, o, my voice.

Now, they've worn the hearing aids for about a half hour, 45 minutes or so. If I make the adjustment from medium to maximum, they're going to hear the difference. Now, if you do it too soon, they're not going to hear that. So I would only make an adjustment if they say something. If they don't say anything, I let them go at medium, and when they come back, I ask them directly, how is your voice?

And if they say, hey, can you make it a little better? I then would make an adjustment then, but I see how they get. I never want to box myself and do maximum out from the beginning, because then I've got nowhere to go. I like to leave it at the median. If this is the patient that's worn hearing aids for a really long time and is used to their voice being loud and boomy, and now you ran OVP, and now they're talking louder because they can't hear themselves and can't monitor, bring it down to minimalmum, I never like to shut it off.

OVP is going to give you so much benefit. The hearing aids are going to work better in noise with speech. It's going to give you the information that's in my well being in their app. I never like to shut it off if, if I don't have to. So I always keep it at the medium.

I run it for everybody and then make adjustments from there, from what you need to. But you'll see it's a huge benefit to you because you can get more audibility out of the hearing aid. I love it. I think it's a great benefit and it's unique only to signia. No one else has own voice processing.

So let's. That's it. That's all you got to do for a first fit. If you're doing verification, you're going to be using your basic tuning or your fine tuning. Basic tuning is quick and easy adjustments in three decibels steps.

It's more broadBand adjustments. So master gain is going to be all three curves. Each click is going to be about three decibels. Loudness, loud sounds, that's your loud curve. Medium sounds, that's your average curve.

Soft sounds, your soft curve. But that's doing broadBand adjustments, bringing the whole curve up or down three decibels every click. So you want to be more conservative with the clicks here. You don't want to be really aggressive with the clicks. Speech.

I love this area and this I go to for follow ups. The speech is going to make adjustments, broadBand, but from 750 to 3000 Hz, your speech area. So watch your graph. I'm going to make an adjustment now. I'm going to click it once and you'll see just the speech area popped up.

Click it again. Now that's almost a nine decibels adjustment. That's huge. Click it again. o my God, that's nine decibels.

That's a lot of adjustments. Be careful of doing that. You want to be more conservative with your clicking. So I'm going to go ahead and bring this down and I'll bring this back to where it was. You never really want to do like three clicks on this page is a lot of clicks.

I also like my sound quality. It works like a seesaw. And your fulcrum, your knee point is about 1500 hertz. And you'll see if I make it sharper. My highs go up, my lows go down.

So just as a little shift. If I make it softer, the lows go up, the highs go down. And again another little shift. I like that one click for like those people that come in say, o, everything is just too sharp. You click it softer one click and it just kinda of smooths everything out but still keeps you on target.

I like that one too, as well. Those I use a lot. Again, remember though, you want to be more conservative on this page because every click is about three decibels. It's broadBand adjustments. Usually the page you're going to use for verification is your fine tuning page and it'll be the first one.

Your sound and loudness. Sound and loudness is where you do your frequency shaping. So this would be the same master gain, overall gain, all three curves. But now it's frequency specific. All right, you can click and drag and highlight just an area.

You can make the adjustments on the graph. Or once you have an area highlighted you can click and drag. But o, look at that. That was huge. You might not have wanted to do that.

What if you did that by accident and you don't know where to put it back to? Do not worry. The undo button up here, the little arrow back undo. You can click that literally 100 times to get all the way back to the first of the first bit of that session. So I love the undo or the redo button.

So if you ever do anything and you think you've done too much, you want to get back to where it was or you made an adjustment and the patient's like o, I don't like that. Now undo. I'll take it all off, don't worry. If you're going to make adjustments here, you want to make adjustments to some of the sliders. I like using the arrows.

I am very hesitant to change the sliders as we did because you saw how aggressive they could be in just a little movement. I like to do the arrows. Double arrow is three decibels, single arrow, one dB step. Okay. So that way you might have a little bit more control of what you're adjusting.

Okay. And click outside to take the highlight off. That's your overall gain. Under the gain tablet is where you find your three curves. Your 50 decibels curve is your soft curve, 65 decibels curve, that's your average curve.

80 decibels curve, that's your loud curve. I can click and drag and highlight a section. And again you got, your double arrow is your three decibels steps and your single arrow is your one decibels step steps. You can also make adjustments, as we said on the graph, you can click and drag and make adjustments there. But I kind of like the numbers.

I like to see what I'm doing. You can have as many as 20 handles or as little as one, however you want to adjust it how you want to make those adjustments. This is how I do my verification. I would keep the both right and left ear linked. I usually do frequency shaping, which would be my overall gain to my 65 decibels curve, giving me a head start.

And then I go to, for my average curve, then I go into gain. And then I would do the soft, and then I would do the loud, and then do the mpo. And then I would uNCOuple them and do the other ear. Usually both ears are about the same, so it kind of gives you a head start. And that's usually how I do my verification.

Quick and easy and done. I want to show you the adjustments for the MPO. Okay. This might be a little confusing for some because it's negative numbers. Okay.

It's based off of your matrix, of your receiver. Matrix will always be up on top here. This is an s receiver. It's a 100, 1046. 110 is your maximum output.

46 is your peak gain. So you're looking at the maximum output, the 110, the bigger number where it says zero, it means the output is 110. When you've got, let's say, let's make this and bring this down to something else. Here we go. We'll bring it over here.

So here, where you've got the output is zero. The output is 110. Where it's negative three, the output is a 107. Where it's a negative seven, the output is a 103. You do math, mental math in your head.

That's what the negative numbers are. But where it's zero, it means it's maximum. It's at the 110. So really easy to figure out. And you can also see on your graph the little shaded area on top in the dark red or the dark blue that's showing your mpo, that the reduction there.

Okay. And that's how you would adjust it. And that's all I would do. If I was doing my, my first fit verification, I would use my basic tuning or really more my fine tuning with the sound and loudness. Everything else that's in here is really more for follow ups.

Okay. Let's say the patient came back and said, I'm having problems with speech. Your first question would be, when? When are you having problems with speech? If they say, I'm having problems all the time, even in quiet here, I can't hear you.

I would make that adjustment under basic tuning, and I'd go to my speech, and I'd bring up my speech here you. Easy, simple, done. That takes care of speech all the time. But if the problem was, well, I hear you just fine in this room, it's great. It's when I'm out at the meeting or when I'm at the restaurant that I'm struggling.

That's when I'm going to make my adjustments in my dynamic soundscape processing, my DSP. My dynamic soundscape processing is phenomenal for follow ups. And it's actually two separate controls that are here on the same page. What this is doing is making your universal programme all automatic.

And what you're doing is you're fine tuning and you're adjusting that universal programme right here.

So if the problem was that they're hearing, not hearing well when they were in noise, but everything else was good, I'd come here. Or if they're having problems in the car or with music, this is where I would come to make my universal programme perfect for them for these different scenarios. This top part is the little cartoon is your noise reduction, your directionality. So this top part are all your algorithms. This is also your real time conversation enhancement.

So when we said that multi stream architecture with up to the three focus beams on top of the split processing to pick out the speech as people are walking around, this is the control that controls all of it, makes it more directional versus more omnidirectional. Me, the starting point is smack dab in the middle at balance. That's the equal amount of directional and omnidirectional when they're in quiet. So this first little picture depicts people talking in quiet. And then in the next picture is them at a noisier cafe.

And the last picture are people in a loud restaurant or a loud party. The red lines are showing you your conversation support. What you're adjusting is the black. So set it balance in quiet. It's the equal amount of directional and omnidirectional.

When they get into noisier situations, you see the speech support gets a little bit stronger. And then when they get a really noisy situation, the speech support is even stronger still. So it's going to adapt based on these situations that they're in. What you're setting is the starting point. If I went one step up towards highlight, I'm making it more directional, a little less omnidirectional, adding more noise reduction.

You can see I have a little bit more speech support and quiet, and much more so when they get into those noisy situations. If I go down towards awareness, it gives me a little bit more omnidirectional

and quiet. But you'll see I still have that speech support that conversation. Support when they're in noisy situations and I have multiple talkers all talking at once, I still. Even though I made it more omnidirectional, maybe my patient said, I want to hear the clock ticking when I'm in my living room, you know, that soft little clock.

Or, hey, when I'm at kitchen, you know, having dinner with my, my family, I can hear my wife, but I'm not hearing my son next to me as well as I, as I would want. So maybe you make it a little bit more omnidirectional. He's hearing more around him, but that's not making it omnidirectional. In all the noisy situations, that's just, just the starting point. So what I would do is keep everybody smack dab in the middle of balance.

I don't make adjustments at the time of first fit. I will make adjustments based on their follow ups if they come back. And this is the person who says, I am struggling in noise, you know, I hear you just fine. So when I'm in the meeting, I would move him up to one step towards highlight. If he comes back again and says he's still having problems, another one step towards highlight.

I never jump the two steps, steps or three steps all at once. Way too drastic, way too severe. You want to do baby steps, do one step at a time. Okay. What I want to show you as well is this top part is all your noise reduction, your directionality, your real time conversation enhancement.

This is all so you hear better in these noisy situations. It's not affecting gain. It's affecting all your algorithms rhythms. The bottom part is where you frequency shape the gain for those different offsets. Now, a lot of people think that because it's grayed out, o, I'm not supposed to touch it, and I can understand that thinking.

But no, the reason why it's grayed out is because quiet is what's indicated when you do your verification, when you do your first fit, that is all based on speech and quiet. So the reason why quiet is

grayed out is because you've done that all in your fine tuning and your basic tuning. That is your starting point, speech and quiet. So everything is all zero because that's the starting point and it's grayed out. If I go into noisy, that's going to be the offset based on speech and quiet.

So in noisy, this is what the hearing aid is then going to switch to when it detects that you're in a noisy situation. How you read it is based off of speech and quiet, and it's all in DB. So I would read this as 0011. On the bottom are all my frequencies. What that means is the zeros mean it's the same as speech and quiet up until 1500 hertz and then above 1500 hertz it's 1 dB louder than speech and quiet.

It, that's the default for noise. So if this is my patient who came in and said he's struggling in noisy situations, I would first go up top here, give him one step up towards highlight, make it a little bit more directional, give him a little bit more conversation support. And then I would come down to my equalizer. And you know what, if I'm making gain adjustments, I want to see my grab. So I'm going to click on this I with the graphs that's over here on the right hand side, and I'm going to click on that button and that's going to open up the graphs.

And where I see for noisy zero, zero, that's my noise area. That's below 625 Hz. So that's not going to affect speech, that's just noise. And right now it's set the same as speech in quiet. So I'm going to do a cut, I'm going to bring it down three decibels.

So I'm going to do three clicks, make it a negative three. And what I'm doing now is I'm making the noise area where there is no speech located three decibels softer than it was set when it was in quiet. So now I brought down the noise and then my next three handles. The zero plus one, plus one is from 625 Hz up to 4500. So this is my speech area, these three handles.

So instead of being just a little bit boost compared to speech and quiet, I'm going to give them a two decibels boost for speech and I'm going to click two clicks in each of those three handles. Now, if you

look at your graph, when they're in quiet, the patient's at target. When they're in noise, the lows go down, the mids pop up. So this is what the hearing aid will do automatically when they're in that scenario. So this is where you can fine tune that universal programme.

You don't have to give them extra programmes. Remember, our hearing aids were meant to work all automatically on universal programme. You don't need those extra programmes to give them a noisy situation or this situation or that situation. Let the universal handle it. And this is where you can make it all automatic.

So if the patient comes in and says, you know, I love music, and I really want to hear, you know, the horns I love to hear, or the violins, really high pitched. I want to hear them squeal. Maybe go to your music setting and turn up your highs. It's not going to make everything high pitched just when they're listening to music. Or if they say, when I'm in the car, I can't hear the speech, go to the car offset, turn up the speech area.

So this is where you can really fine tune that universal programme, make it all automatic. Remember, the bottom part is your frequency shaping, and the top part is all of your algorithms, your noise reduction, your directionality, your real time conversation enhancement. That's what this page is for. And this is what's going to really make your hearing aids perfect for your patients at any of your follow ups. I love this page.

The dynamic soundscape processing. So we covered that. We showed you already the basic tuning, which is the quick and easy adjustments in three decibels steps. Fine tuning. That's where I'm going to do my verification in my sound and loudness.

Frequency compression is also here under fine tuning. So if you wanted to use frequency compression, you have that option. Most of the time it doesn't default to being on, but if it did, you would know it

because if it was on, and I just put the check mark there, no matter what page you're in, you're going to see it on your graphs that that is on and it's been applied so you don't have to just go into that screen to see if you have frequency compression or not. The black is what's being rolled over, or rolled off rather, and it's being pushed into the pink and the blue area. And you can control the width of the black, what you're rolling off with the bottom control your f maximum, or you can control the width of what you're pushing into with your f min, the top number.

Okay. Sound settings. Sound. You know what? I'm going to take my frequency compression off, so that way it's not on my graph.

There we go. Sound settings. This is an important page. All right. Under sound settings, you'll see the center part is locked.

It's grayed out. It is done for a reason. What is grayed out is all of your speech and noise management and your directional microphones with different focuses and adapting and, and making it narrow directionality. All of that is all within your sound settings. The reason why it's locked is because this is what's controlled by your dynamic sound processing.

If you unlock that this page will not work as intended. So it's important to note that in fine tuning you want to keep it locked. You don't want to unlock it and make adjustments here. Okay. Keep that locked.

It's going to give you the best hearing possible. All automatic. In that universal programme, what you can adjust is your e wind screen. That's the wind noise reduction. And we enhance that and made it even better on the last platform.

Sound smoothing. This is for transient sounds. So newspapers rustling, silverware clanging, high heels on a ceramic floor, whatever the hammering, these transient sounds that are so annoying. The default

is a minimalmum setting which is 20 decibels reduction, media 30 decibels reduction and maximum is 40. So you can make those adjustments.

So if this patient is, the patient's really bothered by noise, you might want to, instead of going minimalmum, move them up to medium, give them a little bit more aggressiveness. This is your automatic feedBack control that we talked about, the feedBack cancellation. It's going to default to maximum if you've got a vent or an open fit or default to minimalmum if it's a closed fit. This is the one that's going to be automatic adaptive. You don't need to set any parameters, doesn't lower any audibility, doesn't apply a notch.

It is good. It's a good feedBack system. Just let it work. And then you auto echo shield built into your seven. And then with auto Echo shield it's going to bring down that reverberation all automatically in your universal programme.

So you don't have to give them a separate reverberant room programme. So all of that is built in and it can be controlled on this page. Measurement settings is if you were testing in a test box and you wanted to shut off your adaptive parameters or turn them back on. On fitting assistant is if you needed help. So if you weren't sure of what to adjust, fitting assistant is a great solution.

It's also can be accessed with a little light bulb up here on top. That's your fitting assistant. And with fitting assistant, the problem might be sound qualities, unnatural, too much base. It's going to tell you what you can do or apply it. You can apply it automatically or you could just take it as a hint.

I also love fitting assistant for the patient that doesn't have the verbiage to tell you what is wrong. If they come in and says, o, it doesn't sound right. Well, what doesn't sound? I don't know. It doesn't sound good.

Well, you can go to this page and say, well, what is it? Is your voice? Is it speech? Is it sound quality? Is environmental sounds, and they usually will pick one.

And then once they pick one, you know, environmental sounds, you can go, okay, well, is it wind noise? Is it background speech? And you can go through each one to give them the words. So that might be a help to get your patient more communicative. Okay.

I love fitting assistant. Think of it like having signia assistant for you, where Signia assistant is for the patients, fitting assistance for you. And then lastly, under fine tuning, we have our audio streaming. And the audio streaming page is huge because you can make adaptations to the audio, which would be your audio books or music from your phone or whatever, from the tv with a tv streamer. And if they had a tv programme or hands free, in which you're able to answer the phone and talk back to the microphone in the hearing rates rather than the microphone on the phone.

And so you can adapt for that too, as well. Where it used to be, just the made for iPhone have that hands free capability, but now with the Le audio built in with the firmware update that you're going to do with 9.12 Android is going to have the hands free capability as well. I want to show you something in the audio streaming page. If you have the patient that comes back and says that I can't hear, I when I'm streaming, and it's usually when they're talking to someone on the phone or they're streaming, and 99% of the time, they're trying to do that in a very noisy environment, and they're saying they pulled up the volume on the phone, they pulled up the volume on the hearing aids, and they're still not hearing. The problem is that they're in too noisy of an environment.

I like to go into this page, and I do this at the time of first fit. This is probably one of the few things I make changes, changes to at first fit. I'll go in here, and I'll click on the adaptive streaming volume, and I'll put that on for everybody. What that does is it makes your streaming volume always be louder than the noise floor. So as the noise floor increases, the streaming volume increases as well.

So if they're trying to stream from the gym or from the bus or the plane or talking, you know, on the phone in the restaurant, they're always going to hear because you've upped, that made the streaming volume adaptive. So I love adapting that and putting that on. A few other things I want to show you too. In the software, we have tinnitus options, which you may not be aware of with the tinnitus options that we have, we've got sound therapy. And sound therapy is both steady state noises, like white noise, pink noise, high tone noise, brownian noise.

You could make a custom noise, but we also have ocean waves, which is modulated noises. So this is using habituation, just adding the noise to help the patient get used to their tinnitus and kind of COVID it up or distract them from it. You can adjust the volume, whether you want to make that tinnitus noise to the missing point or cover the tinnitus. Whichever therapy you're using, you can adapt with our software. And then what I also wanted to show you is we have notched therapy.

Now, notch therapy is unique to signia, and that applies a very small half octave notch where their tinnitus is located. It's using lateral inhibition. You have to be able to pitch match. The patient has to have a hearing loss. But what it does is it removes all amplification in the one half octave where their tinnitus is located.

So that way the brain is not stimulated there, so it doesn't add any extra noise. And there's no perceivable ability to tell any auditory change. Everything sounds the same, music sounds the same, speech sounds the same. The patient's not cognizant that that little half octave is missing. But the brain knows, and it learns not to hear that.

And over time, it learns not to hear the tinnitus that's located there. And how does the patient know when it works? While they take their hearing aids out at night and their tinnitus doesn't come back, so it doesn't add extra noise, and it helps them ignore their tinnitus. I love notch therapy. It's a wonderful

option.

We could definitely show you more about it. Contact our audiology department, our clinical education team. We can go through step by step on how to set that up. You under personalization. This is where you have your logging page.

So after you programme your hearing aids, this is the page that first opens up. Every time you read out the hearing aids, you'll see how long the patient has worn it, if they've made changes, what programmes they use, are they streaming? If they use Signiaassistant, this gives you all the information that they made, changes in signia assistant, and you can choose to keep those changes or revert back to what you had them set at if you don't like the adjustments they made. This is all found on the data insights, the logging page. We also offer an acclimatization manager.

So acclimatization manager, you have to turn on. It never goes on automatically without you knowing, but you can set your ending point and it can then increase over time. Over the default is a two month period, but you can make it as short as one week or as long as six months. And you can see how that progress goes along and how you set that up. We have a configuration tablet.

This is where you can set your rocker switch. You could have it as a short press and a medium press. Or, you know, if you had just a push button, you could set your range. You could do everything here. What I love is our system sounds.

You can set your beeps how the beeps sound, whether the melodic or basic, how loud the beeps are. Also you can set if you set it as basic, you can set it the frequency of the beeps. Little hint for you. If you're going to choose the frequency, let me give you a hint that I learned the hard way. You always want to put the beeps where they have the most hearing loss because wherever they have the most hearing loss, that's where the hearing aid is working the most.

If you put the beeps where they're hearing normally, that's where the hearing aid doesn't work because they hear normally there. So a little hint for you, if you've learned nothing yet, always put the beeps where they have the worst hearing loss. Remote controls if you forgot how to pair the minimal pocket, we've got a pairing guide that's right built into that. That shows you how to pair. And then lastly is our programme handling.

And this is where you can add extra programmes. I always like to disconnect using the disconnect button on the bottom left hand corner. It keeps all my bluetooth pairings there, but it also lets me connect again without having to shut the hearing aids off and turn them on again. So if your patient has to run to the bath, you could disconnect right here. And when they come back 15 minutes later, maybe with a cup of coffee because they were stopping and talking, connect them again.

Just keep this page open and you don't have to shut the hearing aids off and turn them on again. To put them in discovery mode. You could just hit the connect button again in the bottom left hand corner and it will automatically connect them without any problems. So of course I had a problem. Of course my left one shut off now, but trust me, it usually connects them both seamlessly.

Let's see if we could do this now. Yep, we got them both on. You gotta love live programming. And that is everything. I wanted to show you quick and easy with our Connex software.

We're going to go back into our PowerPoint so I can say thank you. Thank you for joining us today and for taking the time to learn more about Signia connect. If you're interested in learning more about our products and software, I encourage you to please search out our courses on audiology online. We've got a lot. We've got quick tips that are quick and easy shorts that you can learn just on one topic.

We've got long CEU, we've got research ceus and also just know you can always reach out to us as well. If you need assistance, you can call Signia at 1807 664,500. Thank you again for joining me today and have a great day. Good luck with your fitting things.