Signia: Live Noisy

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Hello, my name is Lisa Perhaps and I'm the Senior Clinical Development Manager at wsa. Thank you for joining our course. Today's course is Signia Live Noisy here on Audiology Online.

Before we start, let's cover a few FAQs. If you'd like to get the handout, you'll find the resources in the classroom under the pending courses in your account. If you'd like to earn CEUs, you'll find it in the same place under pending courses, but you have to pass the multiple choice exam and you also have to have a paid membership to earn CEUs through audiology online. If you need assistance during this course, you can call 800-753-2160 or you can email at customerserviceaudiologyonline.com at the end of this course, you're going to be able to define the improvements to Signia's latest platform Max. You'll also be able to explain how Signia Max uses AI to improve speech understanding.

And you'll be able to describe the features and improvements of Signia's newest form factor, Pure CNG Max. On the screen, you'll see the risks and benefits for today's course. You'll find these in the handout section if you'd like to read through them. You'll also find the handout there, as we said before, for today's course, so feel free to download all of them.

Every conversation matters. We at Signia have been saying this for years because we know what people miss is not just sound. What they're missing out on is the connection. It's belonging, it's being part of something. It's being participating in the group around you in your life.

It's having the confidence to know what is being said and knowing that you can participate. It's living.

So I'm going to take you back to a time when conversation was really put out of question. This is back 2020, back in the time of the COVID pandemic and putting all the health issues aside. It was a time of isolation. It was a time of loneliness. It was a time where everything stopped, everything was paused.

We were in our houses, we were alone, we weren't with our friends and our family. We couldn't go to sports games, we couldn't go to the theater, we couldn't go to concerts, we couldn't go to restaurants. It was very isolating. But then finally, after a couple of months, things started opening up, which we were very excited about. Things started happening at a limited level and we were allowed to attend sports games again.

And that was so exciting. But, oh, we weren't attending in person. The games were playing, the cameras were rolling, but we all had a watch from home. And this is what we heard.

We heard them kicking the ball. We heard them talking on the field.

We heard the coach talking to the players. These are sounds we never heard before because we were missing something. It was just silence. We were missing the crowd. We were missing the experience, the anticipation, the tension, the feeling alive.

The broadcasters knew this and they knew that people were not enjoying the sports as they once had. So they did something. They added fake noise.

This was exciting.

Now we had the anticipation, The tension. It was all there. It was back. Because what the announcers realized was that life isn't experienced in one dimension. The noises around us don't just tell us what's happening.

They make us feel alive. And that is what it is to live noisy. So let me welcome you to the world of Signia Multi Adaptive Experience Max. This is our most advanced platform yet. It revolutionizes how hearing aids adapt to life's complexity.

It's powered by breakthrough technologies that can redefine how sound is personalized in every situation so that the wearer can enjoy life and live noisy. So Signia Max has been in the planning for over 10 years in the making. We started with AX technology with split processing. We built upon that with our IX technology in which we had the first time ever multi stream architecture able to pick out multiple speakers in real time. Max takes that to a whole new level.

We're using AI, we're using DNNs. And what we're able to do is in a very powerful and precise way, steer the way the whole hearing aid is enhancing the acoustic scene. Now we're going to talk a lot about DNNs because the DNNs play an important role in Signia MAX technology. So let's just cover a little bit of dnn. A DNN Deep Neural Network is a type of artificial intelligence that learns patterns in large amounts of data.

So you don't program it with fixed rules. The DNN is trained on these massive amounts of information so that it can learn these patterns without having to program instructions. Think of it like the human brain and how the human brain learns. That's how a learn. So AI is your broad overview.

Machine learning is a subset of AI where that it learns. Machine learning learns patterns and it's programmed with fixed rules. And if you think back, we started machine Learning back in 2000 and oh, I think that was 2004 where we learned the volume control adjustment, whether you turn it up, you turn it down, and then the hearing aid turned on at that, that volume level. Oh, it was 2006. Sorry, excuse me, that was back in 2006.

So machine learning is more basic. It's learning that that programming with fixed rules, deep neural network is way beyond that. It's a deep learning model. It's part of AI and it's made of these very complex layers that learn these complex patterns.

Let me explain. This deep neural network is trained using examples. So let me give you a very simple analogy. Imagine teaching someone to recognize a dog. So with traditional programming, you write the rules.

Dogs have four legs, they have fur, they have a tail, they bark. Problem. Cats also have four legs, fur and tails. So if it was machine learning, you show the computer thousands of pictures labeled dog and not dog, and it learns the difference. But it could get it wrong.

With dnn, it's a deeper layer. It's a very powerful version of that learning system. It learns in layers. The first layer, edges and shapes the next layer. Ears, eyes, fur pattern, next layer, face, body structure, final layer up, it's probably a dog.

So the goal for the DNN is not to memorize every specific sound, every specific picture of a dog. What the DNN learns is the goal is to understand these underlying patterns well enough to recognize them in real world situations. It's a generalization, but it's a very powerful tool. But like all tools, the benefit that they provide depends on how they're used. Now, hearing aid technology has become very one dimensional, focused on just noise.

And as we said before, noise is not necessarily bad. Noise lets you know what's going on around you, lets you know the excitement or the drama that is happening in your life. So the vast power of AI is used for noise reduction alone. Most systems rely on this classic signal, chain seeing, classification, directionality, noise reduction. And AI is added on top of that, usually as an extra layer of noise reduction.

It's not optimizing for a rich and layered conversation and soundscape. It's actually catering to just one dimension.

So when we look at this one dimensional AI processing, it really doesn't matter what the situation is. You could be standing on the street or in a restaurant or at the ball game, or having a great conversation in this really noisy restaurant, or having a great conversation on the side of Starbucks, it really doesn't matter. It's going to analyze that noise and see what's above the threshold. The DNN then is appl. It'll bring that noise reduction down, put directional beam on, and what you get is sound that's definitely quieter, but it's just one dimension.

The problem is real conversation is not static. Even in that same restaurant, listening challenges change every few seconds. One moment the person's in front speaking, the next, someone joins from the side. Chairs are moved, glasses clink, background voices rise. Attention shifts naturally as the conversation unfolds.

So having it just quieter doesn't really help as much as it could because the patient may need the hearing aid to help them stay connected to the scene around them. They may hear less noise, but they're still struggling to find out who's speaking signia. MAX does this differently. It takes it to a whole new level. MAX introduces multidimensional AI system intelligence that's able to understand the full moment.

And our AI, because it's so complex, because it's multidimensional, we are calling this acoustic intelligence. So it's not just noise reduction. We are truly steering the sound. It's not just working to reduce noise. Our DNN is analyzing to guide the whole hearing aid response.

Because what this is able to do is it's able to decide how the wider system should behave, not just noise reduction. And when I say our DNN, I mean four DNNs. We have four DNNs all on our new max chip, working together, controlled by one acoustic intelligence. Think of this as a four core brain all working together. We have a speech detection dnn, an own voice detection dnn, a scene analysis DNN, and a noise analysis dnn.

This is a unified system level intelligence that is, again, think of it as four parts of a brain all working together. It's unifying and coordinating these four DNNs to understand that full acoustic environment with amazing precision. Because remember how we said how a DNN has to be trained on many different samples? Well, we built our acoustic intelligence on one of the most diverse AI training bases that have ever been applied to hearing aids. We've trained it on 40 million samples.

This is across 11 languages, six music genres, and thousands and thousands and thousands and thousands and thousands of real voices and listening environments. So that way our DNNs can react to changes in the environment in just 0.01 seconds in instantaneous real time adaptation to the entire soundscape. This is not just feature level intelligence. This is not just noise reduction. It is a system level intellig intelligence that's controlling every processing aspect in real time.

So let me introduce you to our acoustic intelligence. Our four DNNs are all combining, giving information to the brain, to the hearing aids. So the processing is able to be so precise. And what these four DNNs offer to our hearing aids is enhancement to our four key features. So we'll talk about what those DNNs feed into real time conversation enhancement, ambient scene adaptation, OWN voice processing and dynamic noise control.

So let's first start with real time conversation enhancement which is now evolves into real time conversation conversation enhancement AI powered by acoustic Intelligence. We already had the proven advantage of one of the hardest situations for hearing, which is trying to understand and fast moving group conversations and noise. Real time conversation was able to enhance that pick out the multiple speakers in real time without having to turn and look at who was talking. What we have with MAX is a noticeably stronger speech focus because we have the AI trained specifically to isolate speech and remember what we did with Signia IX with our real time conversation enhancement, we were sampling over 192,000 data points a second. Well, MAX takes this to whole nother level because

now we are able to sample 75% more data points per second than IX ever did, which gives us stronger, more targeted speech enhancement, lower noise floor, better understanding in noise.

And that's been proven. 97% perform better in noisy group conversations with Max versus key competitors.

Another feature that the DNNs are making AI or amplified is OWN voice processing. Own voice processing is now own voice processing AI powered by the acoustic intelligence. We all know that making the patient's voice sound more comfortable to them can enhance the sound quality of the hearing aids because you could match to target. So we know that own voice processing is a proven advant.

So now we made it easier for you. It's already trained. We trained our DNN on 1.5 million voice samples. So that way out of the box OBP is going to work. It works instantly out of the box, active by default for every single wearer.

There's no extra setup, there's nothing to remember, there's no added fitting set. So when you, when you fit those hearing aids, OVP is going to be applied automatically. Because now that training was done by AI. And this is a huge help for you because we've got the research that shows that OVP can help reduce return rates by up to 30%. So having it on for everybody makes it a huge advantage for you.

We also offer ambient scene adaptation in which traditional scene classifiers simply or just simplify that soundscape into predefined categories. But simplifying complexity comes at a huge cost because the restaurant is very different depending on where you sit, what time of day. Preset scenes trigger preset responses, but real life's not like that. It flows, it overlaps, it evolves. So what ambient scene adaptation powered by acoustic intelligence is able to do is will continuously interpret the wearer's acoustic

environment.

Again, we trained it on real world acoustic complexity, so that way it's simultaneously analyzing and optimizing across multiple environments parameters. We are optimizing up to 800 million parameters per second. It's not geotagging, because geotagging could be different depending on the time of day, depending on where you are within that environment. So there's no fixed scenes, there's no mode changes, there's no lag. This is in real time, continuously analyzing and optimizing all of what's going on in the environment.

It's scene understanding with additional real time information, which includes reverberation, spectral structure, temporal dynamics, music, motion sensor data, and wider acoustic context that's going on around that person wearing the hearing aids. It's a multi dimensional understanding of what's going on in that soundscape.

And we also have dynamic noise control, because noise reduction has become very good at one thing, recognizing when there is noise and turning it down. Not every loud or constant sound is something that the wearer of the hearing aids needs to be removed. Whether the sound should fade into the background or remain part of the environment, or stay fully audible, and depends on both the type of sound and the listening situation. So the right response in real life is not always simply less noise. Dynamic noise control AI is designed for a simple reality, the right noise response that depends on the situation, so that noise reduction increases as complexity increases in order to prioritize speech.

But it's also going to balance out for comfort and keep the wearer safe, no matter what environment they're in. The goal is not just to detect and reduce noise, it is to control noise intelligently adapting to the background to what's happening right now. So when we look at Signia Max multidimensional sound processing, the sounds coming in, we are using still our foundation of split processing, processing for speech, processing for background sounds. And then we have the acoustic brain, the acoustic

intelligence, our four DNNs all working together as one coordinated system at the same time. So that way it can understand a different dimension of the sound that's going on at that moment.

And those four DNNs together feed into each of those four key features. And it's not just one DNN goes to one key feature. It's all for that core Brain of acoustic intelligence is all giving information in all of those aspects to improve real time conversation enhancement, to improve own voice, to improve ambient scene and to improve dynamic noise so that what you are left with is continuous sound adaptation. So with acoustic intelligence, everything is understood together, everything is balanced together, everything adapts together in real time. It's always on, not have to turn it on, don't have to go into a certain program.

This is the power of max. Four key features controlled by one coordinated intelligence every single moment. So you might ask, why does acoustic intelligence combine four separate DNNs instead of just one large scale DNN? Well, if we just had one large scale DNN, it kind of looked like this.

So a large scale DNN aims to perform all the tasks simultaneously. And it's going to be very complex, it's going to use a lot of power. It's a big chip, so you got a big honking instrument. It's not going to last that full day. You wouldn't be able to have it on all the time.

It's difficult to train. You're going to have cross task inter. You can't change it out in the future. There's no room to add anything else new. So instead we have task specific DNNs.

It looks more like this picture. It's a smaller footprint, we don't use as much battery drain. It's very efficient to train and it's future proof because we could easily, if more things come out that we want to add to the dnn, we can replace one, add another. You don't have to retrain the whole thing to add flexibility to integration of another sensor. It gives us that capability.

So that way we are able to use all of this information simultaneously and the best efficiently.

It's a whole new chip. And this breakthrough is only possible because the new Signia Max chip, which increases the processing performance generation after generation. This is the most we've ever had compared to IX technology. We have 50% more efficiency, we have 54 times more processing power and we have two times more the memory that we were able to offer in ix. This was what letting us do the acoustic intelligence always on, all day, all the time.

Because the efficiency is what allows these four DNNs to run simultaneously. And this intelligence is very valuable only if it lasts from morning to night. And with Signia Max it does.

So let's kind of take you through a day if you're wearing just one dimensional AI hearing aids versus the Signia Max. So you're going to meet your friends, it's a get together at the hot new restaurant in town. You're really excited to meet up with them. You've been waiting for a while to get your reservation. You heard that there's some hot new pop star in the area that might be cited.

You're really excited to get there. You get there early, you go in, you sit at the bar, because now it's a lot going on. This is a really cool restaurant. You want to observe and take in all the ambiance while you wait for your friends, your one dimensional AI hearing aids going to analyze all the noise that see that's above the threshold, apply that maximum DNN reduction. And when that hot new pop star came in and the buzz went through the crowd and they went to their table, you missed it.

You missed it completely because you're isolated from the environment. It was quiet, it was comfortable, but you missed all that energy. You just sat there. You were comfortable, but you weren't living in the moment. But you have Signia Max with acoustic intelligence and it's able to analyze.

Hey, you're sitting at the bar, there's speech babble all around, but no one's talk talking to you. We know you're inside. Let's balance out that noise reduction, make it a lot more comfortable for you, but not completely cut you off. You're still immersed in the environment. So when that hot new pop star came in, you heard the buzz through the crowd, you turned and looked and you were able to see them.

Very exciting. That's what Signia Max is able to do with acoustic intelligence. Now your friends just got there, you're so excited, sitting at the table and you want to have this conversation. But now the restaurant got even more crowded because it's really hot and it's got really noisy in there. So with your one dimensional AI hearing aids, it sees that noise is above the threshold.

It uses maximum dnn. You are able to follow that conversation of the person that you're looking at. This is great because it's so much quieter, but the conversation is not static. It moves to the left, it moves to the right. Voices overlap, people interrupt.

And by the time you turn and look at one friend and then the other friend, the conversation already shifted. So now you're no longer immersed in the conversation. You're just trying to keep up, you're managing, but not if you had the Signia Max with acoustic intelligence because it's going to see where you are. You got multiple conversation and partners, but yet the noise floor is really high and it's Got babble noise and also probably music and other things that are going, going on. It's able to lower that noise floor, use that noise reduction, maximize it so you can follow the speech.

And we're applying real time conversation enhancement. So now you're able to hear everybody whether you're looking at them or not. You're not chasing the conversation, you are living in it. The noise didn't change, the moment did. And acoustic intelligence will adapt with it.

That's the difference. It's not optimized for noise, it's optimized for living in the moment.

Now, dinner's over, you're waiting outside, your Uber's coming, your friends have all left, traffic is zooming by, and with your one dimensional AI hearing aids, it knows, hey, you're outside, it's really noisy on this corner of the street. It's going to maximize your noise reduction. And oh, oh, you almost got run over because the scooter just zoomed by with that maximum noise reduction, you kind of lost awareness of what was going on around you. But with Signia Max AI, it knows you're standing outside, outdoor environment, there's traffic, you're not talking to anyone, it's going to lower that noise floor. But it's also adapting to the moment.

It knows that you're outside, it knows that you're in traffic and it knows that it's. But at that moment in traffic, you need awareness. So instead of aggressively suppressing the environment, it's going to maintain maybe omnidirectional listening with the light, appropriate noise reduction. So that way you've got that full awareness of surrounding and you feel safe, you're not getting run over by that scooter. That's zooming by.

That's what acoustic intelligence does. It delivers an optimized response for every sound scene. So that way you can live in the moment, you can contribute confidently, you can live noisy, that is Max. So let's talk about other things that Max improved as well. Because it's not just the four DNNs with acoustic intelligence.

We've improved our E2E 5.0. This is our binaural connection, keeping the ears in sync with a audio data rate interchangeably with stronger signal. So that way it's more robust, it's faster, it's also on a better broadcast frequency, so it has less interference. All of this combined makes that binaural communication stronger and more reliable between the two hearing aids. What we also improved is sound smoothing 2.0 and E windscreen 2.0.

We're going to talk a little bit more about that Signia assistant. We made it more like chatgpt with natural language. But let's first talk about sound smoothing. So prior we had a two channel broadband

sudden sound reduction that worked independently on each hearing aid. Now we have them synced together.

It's a high resolution reduction of sudden sounds across all of the channels. So it's much more precise. We have that. And why does that matter? It's going to keep the speech intact and have you comfortable without having to reduce the gain.

The sound is accurately represented with localization preserved. And I'll explain what I mean by that because this is huge by having it work together. And the aids actually have better sound quality and better retention rates when it's able to fit your end users needs to fit the wearer's needs. So let's talk about how noise reduction is usually done when it's transient sounds. No hearing aids, it's always going to be louder on the side where that sound is coming from.

So if there's a bang, a clap hammer hammering the ear that it's closest to that is obviously going to be louder. That's how we localize with hearing aids that don't have a binaural link. It's going to lower that noise and now you lose that localization capability because it's only lowering the noise on the ear where it's the loudest. So you want the ears to be synced together so that way when that sound comes in, it's going to be lowered together on the side that where the sound is coming from, it's going to be a little bit louder than the other side, still preserving that localization capability. So that's one of the improvements with sound smoothing 2.0.

We've improved the E windscreen. Prior it was a broadband wind noise reduction across all the microphone inputs. Now we're looking at each individual ear, looking at the microphone inputs from the front microphone, from the back microphone, selecting the microphone with the best signal to noise ratio on that side. And it's detecting and reducing the wind noise in the lowest 16 frequency channels. So it's your lowest third channels because that's where wind noise really does resonates, usually in the lower frequencies.

As the wind noise goes faster and faster, it does spread a little bit more to the highs. But what's affected for audibility is your low frequency. So that's why we're targeting just that area for wind noise reduction. So that way we're preserving speech.

What we are also able to offer. And this is so exciting is One Connect technology. Gone are the days where you have to ask what phone you have because all in one platform. We are able to put in Bluetooth Classic and Bluetooth LE Audio Audio as well as Oracast and Telecoil. So what we have for One Connect universal connectivity is you don't have to worry about what hearing aid they have picked versus what phone they have and will it work.

Together we have LE Audio, Bluetooth Classic compatible in one device as well as Telecoil for now and Oracast for the future. So it's going to be a firmware update in the spring. The hardware is in the hearing aids. So inside Signia Max, we've got it already set up and ready for oracast to update it. For oracast they can either go visit you and do it through the software or they can do it through their new app and they'll just do a firmware update that way.

So we know that oracast right now is in very early stages. It's starting to be implemented, but again the protocols for setting up or cast are not going to be defined until the end of 2027. But we wanted to make sure that Pure CNG Max wearers are able to take advantage of oracast as it becomes more available. And they are also able to have an integrated T coil for right now, for today for direct streaming from public systems. So that way they have the best of both.

It's ready for now and ready for the future. With Pure CNG Max, we have brand new software that we've introduced. This is our Connext 10 software and it has been updated to enhance and make it easier for the hearing care provider for you in your office. We've also made it apparent that there is a change, that it is a new chip that it is behaving differently because you've got new information. When

we look at Connext 10, what we've updated is your first fit, make it easier, more efficient, a little better to see and define the information.

What I love is the obvious apparent acoustic intelligence information. And we have that in fine tuning and also in support. When you read out the hearing aids with your data insights, you're going to be able to see much more information. Different environments that your patient has been in, really, really narrowed down and specific areas so you know what to adjust and you have that adjustment capability under fine tuning under the Acoustic Intelligence tab. We have a whole new course that's available today as well on Connext 10 software.

So I highly, highly encourage you to take that as well with Audiology Online because it will fill the entire hour with with all the great information we have that's now available in Connext 10.

We have an improvement to the app we are introducing for Signia Max, the Signia One app. It will also be available for instruments going forward, but Signia One app is just for Macs. So if you are programming or using any of the other platforms that we have available, you still have your Signia app app. So just know we have a brand new app. We'll have some great quick tips available here on Audiology Online.

That's going to cover quickly what you need to know about Connext 10, what you need to know about the Signia One app with with connectivity, with pairing, very easy, very simple to use. I encourage you to please join us for some of those courses too as well.

And we have our next generation of Signia Assistant. Signia Assistant is was our live deep neural network. So technically we have even more than four DNNs with Signia Assistant. It's able to make adjustments in real time to the patient's hearing aids to make them more comfortable for them. It's kind of like having you in their pocket.

And Signia Assistant now offers, offers an enhanced activity that has a chat functionality that's, that's similar to like a chat gbt. It uses natural language. The patient could just type in. It will help the patient with what to expect the first week of wearing the hearing aids, how to pair, how to how what the sound should be like, adjustments to the sound. It's going to really enable that patient to have an ability to affect the sound quality to their hearing aids in real time while they're experiencing an issue that could possibly be detrimental to them.

And we also improved telecare so we have updated this too as well. We have an asynchronous remote fine tuning now with Telecare. So that way it's going to be much easier to use, a lot more stable, it's seamless with a smoother connection. What we were able to do with telecare is actually give a more efficient way to support by removing the audio video calling from the Connext 10. You can still call your patient through FaceTime, through any other chat that you you deem possible.

You can also call them on the phone, get the information, what they need and you can make all of those changes in the Connext 10 software and then send it to the patient for them to apply so that way it's a lot easier to make those adjustments. You could be talking to them on the phone while you make adjustments and then send it right over. That way you can make the changes that are appropriate for the patient without them being physically in your office.

So I gave you a little hint. I talked a little bit about Pure CNG for form factors and accessories. So if you caught that, you were right. We are introducing the Pure CNG Max and we're calling it cng. That's charge and go.

That's rechargeable. We shortened it. You all know what charge and go means. So Pure CNG Max is what we're calling it and that's what you're going to see in your software. What we have for the Pure CNG Max is rechargeable with a full day of power.

We also are using all the same earwear, so you don't have to get new sleeves or new receivers. And as we said before, we've got complete connectivity. No one else is able to offer you. Bluetooth LE Audio, Bluetooth Classic telecoil and oracast all in one instrument. We've got an LED light that we know that you love, as well as the serial number window on the underbelly.

And we've got dual push buttons and they are available starting August 24th in max 7, max 5, max 3 and in the S demo.

So let's talk about our enhanced moisture protection. As you know, all of our Hearing aids are IP68 rated. That's the highest for dust, highest for moisture. And by having that IP68 rating, we know that if moisture does get in that, it's not going to do any damage. That's what the 6, 8 rating means.

But we took it a whole nother step and we pushed it even further. So what we've done is we have plasma enhanced vapor coating. So what we've done is we've applied a vapor to all the internal components. So that way it's going to cover every single crevice, every single little crack gap edge joint, all of the hard to access parts that are on, on inside the hearing aid it covers and it's creating this ultra thin moisture repellent protective layer over the internal components. So that way if moisture does get in, the inside is really protected.

So that way we have even a more robust everyday performance and really protect the hearing aid outside and in.

We've got all day power. That's right. With Bluetooth classic, with Bluetooth LE audio, with having four DNNs all work simultaneously, continuously, all day. The entire time the hearing aid's on, you're still getting 30 hours on a single charge, 28 hours if you're streaming with Bluetooth LE Audio for about five hours, let's say, and 22 hours if you're streaming with Bluetooth Classic for about five hours. And just so

you know, again, the average, most people are streaming about two hours a day.

So you're definitely getting a full day's worth. Even if your patient is streaming and if they're in complex listening environments the entire time, that's okay. It doesn't cause battery drain. And we still have the quick charge capability too as well. Throw it in a charger, give it 30 minutes, you're going to get about six hours extra runtime.

We have three chargers that are available. We have the portable charger Pure 3.0, we have the desktop charger Pure 2.0, and we have the Multi Charger. So when you place your order, you're going to get the Desktop Charger. You can change that to the Portable Charger or the Multi Charger if you would like. And the Portable Charger Pure 2.0 and the Desktop Charger Pure 2.0 are different.

They are new chargers that we have available just for Macs. For the Portable Charger 2.0, it's going to fit the hearing aids with the receivers, all lengths, so it doesn't matter even up to the five length it fits. And it's going to fit most of the ear molds. It also, it's going to charge up the hearing aids four more times without being plugged into the wall. Takes about three hours to fully charge up if you're using the USB cable, the USB C cable, if you're charging wireless.

And yes, you can charge it wirelessly, it takes a little bit longer, but that's so exciting. So you have both options now with the portable charger Pure 2.0, and you've got the LED lights that show you that it's charging. Charging. Come to mention those LED lights, I think you're gonna like this. We have two color LED lights now because you've been asking for it.

So with those two color LED lights, it's gonna be solid green when it's turned on. So when you take it out of the charger, remember it's got that about 6 second delay. Take it out of the charger and then that solid green light will come on. Or if you turn it on or off by pressing the bottom of the push button, hold it down for about five seconds, you'll see it turns green. When it's turning off, it's going to blink red.

So you'll know just by looking at it if it's turning on or turning off. We also now offer a caregiver mode and this is accessible right in the software. You have to turn it on so the patient can't turn this on themselves or they can't turn it off. You are turning this on in the software. You have to put a check mark there.

It does not default to going on, so you have to turn it on if you want your patient to have this mode, mode. And what this does is it makes the LED light blink every five seconds if it's on. So if you turn caregiver mode on, it'll blink five seconds, just a green every five seconds, just one little blink. So that way you can look at it and see that it's on. If the battery is dying, the blink then turns red, but it'll always still blink every five seconds.

Green means you've got got good battery life. If it starts blinking red, needs to be charged. But that's what caregiver mode is. And that again has to be accessible by the hearing care provider. There's no way for the patient to turn that on themselves.

Size wise, you would think that with all that's going inside the CNG Max, that it must be huge. And that's why we have new chargers. It is almost the same size as the bctix. It's a little shorter, a little fatter. Honestly, visually I couldn't tell the difference.

So as you can expect, size wise, it's still about the same with having Bluetooth Classic, with having all of that acoustic intelligence capability. And that's because we have that brand new chip with better processing power and better efficiency for Signia Max, it's available in eight color options. We've coordinated the names to make it easier. So that way if you work within the WSA family, you know that silver gray is silver gray, titanium gray is titanium gray. Regardless of who you deal with, make it a little bit easier.

But just so as you know, the S demos are still available in black.

As far as acoustic performance, as I said prior, we are using all of the same earware 3.0. So we use the same receivers, the S receiver, the M receiver, the P receiver and the HP receiver. So you can fit from a mild to moderately severe hearing loss. You could pretty much fit almost every, I'd say severe, severe, possibly profound hearing loss depending on the hearing loss for the hp. But you can fit it.

You can. You also have the capability of using the ear tips, the sleeves, the round, the mini receivers, the same wax guard. You can use custom ear molds if you want. All of that is compatible with Max.

We have three accessories that are available for pure CNG Max. Well, really two accessories and the other one's for you. We're using the TV sound. We also are using a new remote control called Remote Control. And you're programming it using your NOA link wireless because of course you've got all the Bluetooth capabilities.

So let's talk about what's changed with the TV sound. This is exciting. It works. Now out of the box, you don't need to configure anything. It's going to stream directly to the hearing aids via Bluetooth.

And to access that streaming signal, all your patient has to do is go to their Signia1 app and push the button in their app or just do a medium press. The medium press out of the box is ready to pair with the medium with the TV sound. So again, you don't need to set anything up in the hearing aid. It's all ready to go to work with the TV sound. And as I said prior, we have a new remote control and it's called, it's a very hard name, I hope you can remember it.

It's called Remote Control. And this replaces the mini pocket remote control. So it's the same pairing process. Everything is the same. It's still using coded high frequency sound.

It just has had a facelift. So that way it looks a little bit better. It can change the volume control, it can change programs. It's paired acoustically, same process. And just because everything is the same, Max would use, would work with a mini pocket or the new remote control would work with any other hearing aid because it's all working the same.

But again, this is just. It got a facelift and a new name, so it looks a little bit sleeker, a little bit better, a little bit more. Or Signia, I want to cover something with you as well. We said that the Pure CNG Max is available in a 7 Max, a 5 Max, and a 3 Max. So you might be sitting there thinking, what is the difference between the technologies?

Does only the top end get acoustic intelligence? Does the rest just. Just not get anything? Well, let's go through those difference between the performance levels for you. So as we said Prior, we have four DNNs that are all working together as a brain under our acoustic intelligence and they all feed into our four key features.

So the speech detection, dnn, own voice detection, dnn, scene analysis, dnn, noise analysis, DNN all work together to make our key features optimized and get that continuous sound. That acoustic intelligence, the foundation behind Signia Max, every level has that foundation, every level has acoustic intelligence. So Whether you're using a 7 Max, a 5 Max, or a 3 Max, they all have the four DNNs and they all have acoustic intelligence. So you might be sitting back there and say, hey Lisa, wait a minute. If they all have acoustic intelligence, why should I even bother doing a 7?

There is a big difference. The higher the level gives you a more precise sound quality, more capabilities of what that instrument can do. So they all have the same brain of having the acoustic intelligence. But what they can do with it varies based on the level of technology. So with the seven, a seven on a max instrument is going to give you the most help in all listening environments with the least amount of effort.

So in a 7, you have AI, you have the acoustic intelligence, you have the ability to classify all these different environments. But what you're able to do with real time conversation enhancement is have the maximum benefit because you have three additional focus beams on top of the split processing that are able to pick out the multi speakers in real time so the listener doesn't have to turn and look at who is talking. What you also have in the seven is the most extended of the bandwidth. So that way you have the best access to all of the speech cues and you have the most channels. So that way you have more precise steering of the sound that the hearing aid is able to do.

As well as having more capability within the hearing aids. You have auto echo shield, you have the advancements that are only in a 7. So what a 7 has is maximum enhancement. So that way for the person who's very active in demanding environments that needs to have the best hearing with the least amount of effort, 7 is a great option for them. When we look at max 5, one focus beam on top of the split processing, so enhance the speaker, but you have to look at who is talking.

You're still going to be able to hear the people off center. But the strongest ability to understand comes when you're facing the person talking. So looking at the person talking is highly recommended. In the five, you have all of the AI, you've got all the four DNNs, but it's working in a little bit smaller of a bandwidth and less channels. So again now we're decreasing a little bit of that fitting precision.

Great for someone in demanding environments. But maybe only is talking to one person ever, maybe they're not in environments. Biggest busy group conversation for max3, a great core solution. This is for people who want increased comfort. You've got the DNNs, you've got the acoustic intelligence, but you don't have any focus beeps.

So you're going to get great sound, but really geared toward those people that are in less complex listening environments, that are in more simple conversations.

Not quite as demanding environments that that would require a seven or a five. So when we break down those three different levels, they all have the same brain, they all share those four DNN intelligence. But again, you're going to get better group conversation support. In a 7, you're going to have more focus streams. In a 7, you're Going to have that reverbian listening situation all automatic with also better access to speech cues.

Your wind noise is going to reduction is going to work better. You're going to have better precision in your fitting because you have more channels and you have more flexibility with music. So all together, Max 7 is really going to have it all. So what we say is identify what matters to the patient, find out what's their hardest moment, show them what Max7 has to offer, giving them the maximum flexibility with the least amount of effort and then you can step down based on your need. But just know that all of them have acoustic intelligence.

So that is our Signia Max going beyond noise reduction alone. This is beyond single capability. This is system intelligence with acoustic intelligence, system sound capability that enables your patients to live noisy.

Don't, don't, don't, don't, don't, don't, don't.

I know this restaurant. You're gonna love it.

Let's.

That's wonderful. Yeah, Really.

So remember, live noisy with Signia Max. I thank you for joining us today and for taking the time to learn more about Signia Multi adaptive experience. If you're interested in learning more about our products and software, we encourage you to search our courses on audiology online. And always be sure you can reach out to us for assistance at 1-800-766-4500. Thanks again and have a great day.