Trek - Experience More

Recorded Sept 26, 2019

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AudiologyOnline.com Course #33665

Partner: Sonic

- - [Erin] Good afternoon, everyone. Thank you so much much for joining me. My name is Erin Reichert and I am the Director of Professional Services here at Sonic. Thank you so much again for joining me today. I'm so excited to first kick off our newest Super Power and Ultra Power offering that we call Trek. This is a product that I believe very strongly in. I think it's just absolutely tremendous and I'm so excited for each of you to learn about it today and then take the information that you learn and carry it through to your patients in your offices. As a quick kind of view of the screen you're looking at here, I just wanna call out two important pods, if you will. The one of 'em is called File Share and thanks to Audiologic Online, thank you to Melissa, she has created all the presentations into handouts that you are able to go ahead and print out if you want follow along or if you want to reference them at a later date, that's in the File Share pod. Also an important pod there is the questions pod. And any questions that you have during today's session, please don't hesitate to shoot me a message. Just go ahead and type your question. I will do my absolute best to answer the question as it appears, but worse case scenario, I'll make sure to catch all of your questions at the end of today's session.

So without further ado, let's introduce Trek where we will experience more. After today's course, you will be able to describe how SmartCompress technology can control compression in speech-in-noise environments and control gain in non-speech environments. You will also be able to manage acoustic feedback with our Adaptive Feedback Canceller Pro in Sonic Trek hearing aids. Finally, you will be able to list and describe all the available features and technology in Sonic's Trek Super Power and Ultra Power hearing aids. The hook of our 4S Foundation. If you have taken any courses with me previously in the past several years , I always like to talk about 4S Foundation here from Sonic. We are truly dedicated to improving lives through enhanced hearing by constantly focusing, laser focused on our 4S Foundation, which is sound that is natural, speech understanding in noise, simplicity in all we do, and style that stands out. Trek is the most powerful hearing aid product family built on our

Sonic SoundDNA Platform. As you can see here, and this is one of my favorite images from Trek, but you have two different styles here. You will see our Super Power, which is the instrument on the left side of this image, and our Ultra Power, which is on the right side. We also offer two different technology levels that we'll learn about today. Our 80, which is our advanced level technology, and our 40, which is our basic level technology. A lot of people through time really, it's easy to think about that Super Power, Ultra Power patient population and they think, well, they're wearing hearing aids, of course they they're wearing hearings aids. But what, let's talk about these characteristics for this population of hearing instrument wearers. Interestingly enough, only an estimated 5-10% of all hearing impaired users are in the profound category. That's a very small synopsis of people. Only an estimated 700,000 to 1.4 million power users, or power instruments, are sold per year, based on 14 million units a year sold globally. So you can see, this is a very small percentage of the overall population of hearing impaired wearers.

But here's the thing, feature benefit and value, yet again. FBV, every presentation we talk about here at Sonic, we talk about what's the feature, what's the benefit value, what's the value to that end user. With Trek, Sonic's most powerful hearing instrument, profound users are able to experience more of the world around them. These users have a fundamental need for amplification. It's not they they just are choosing, they kinda have a hearing loss, maybe this should help, they flat out need, and Trek helps users embrace conversation, connections, and sound experiences of everyday life with optimizing volume and clarity with greater precision. This is just something to really keep in the back of your mind. Our Super Power, Ultra Power population out there, they are excited and they are your patients that are, every time you have a cleaning appointment or check of the audio, they are always asking you, have anything, what's new. Do I have something I can connect you with? Is there new connectivity? Bluetooth was a huge value add for this population and that is exactly what Trek will deliver today. So Trek, where we will experience more. It's our newest solution to help

patients with severe to profound hearing loss break barriers and embrace new experiences. Trek optimizes volume and clarity with more precision so patients can engage in more conversations, connections, and experiences. As I mentioned, it's built on our Sonic SoundDNA Platform, Trek delivers natural sound while controlling environmental noise at the same time. With advanced connectivity, reliability, and style, Trek gives users the confidence they need to experience more of everyday life. I have a wonderful Trek animation here that I'm just pulling up and share with you that really highlights and discusses the product in its entirety.

- [Announcer] For people with severe to profound hearing loss, Sonic has developed Trek, our most powerful hearing instruments. Because these patients face greater auditory challenges than most, Trek helps them break through barriers to experience more of the conversations, connections, and sounds of everyday life. Trek, experience more. Trek Super Power and Ultra Power are based on our 4S Foundation, sound that's natural, speech understanding in noise, simplicity in all we do, and style that stands out. As the most powerful BTE hearing aids ever built on the Sonic SoundDNA Platform, Trek's natural sound quality depends on speech variable processing with SmartCompress to clarify speech in changing listening environments. SmartCompress further processes the amplified signal to offer more listening comfort in noise as listening environments change without compromising sound quality. Adaptive Feedback Canceller Pro eliminates feedback automatically, providing a better target match for improved audibility of soft speech sounds. To improve speech understanding in different noisy environments, Speech and Noise Management recognizes and highlights conversations, keeping distracting sounds to a minimum. There are settings to reduce background noise at different SNR levels and personalization for patient preferences. Frequency Transfer makes speech cues more audible by shifting high-pitch input to a lower frequency range that patients can hear. And for patients who also suffer from tinnitus, a built-in system of broadband and nature sounds can help to provide temporary relief from this persistent distraction. A

welcome advantage for this population is Trek's Volume Control Step Size. Volume adjustments in one decibel increments instead of 2.5 decibels provider finer, more precise control in smaller steps. Trek offers more connections in more places with 2.4 gHz, Bluetooth Low Energy wireless, built-in telecoil, and DAI/FM compatibility. Users can connect easily to a vast array of music and entertain through smartphones, smart devices, and a variety of easy-to-use accessories, apps, and adapters, and each device is engineered to the IP68 standard against dust, sweat, and moisture. Trek is available in two performance levels and in a variety of attractive colors from classic to stylish. For people with severe to profound hearing loss, Trek can help them experience more, more volume and clarity with greater precision. To explore all the benefits of Trek, go to sonici.com and set up a product demonstration today. With Sonic, everyday sounds better.

- [Erin] There we go, now Trek at a glance. When we take a look, as I alluded to here, we have two different performance styles, or levels. We have our Trek 80 and our Trek 40, with two separate models. Our Super Power, which you will see in this presentation and in other marketing materials as an SP. And an Ultra Power, which is UP. In the image you see here, you can see that the Ultra Power is actually 4.4 mm bigger than the Trek Super Power. These instruments both offer the 2.4 gHz bluetooth low energy protocol as well as NFMI, our Near Field Magnetic Induction system. Both instruments offer telecoil, which is hugely important for this population. Also including LED indicators, incredible connectivity solutions, and this instrument is pediatric friendly. When you take a look here at our fitting ranges, you can see they're incredibly fast for the 80 and the 40 with the Super Power and Ultra Power. Your specs on these products would be, for the Super Power it's a 79-139, again referencing the two CC coupler and the Ultra Power is an 83-142. Please note that special care should be taken when fitting or even doing a listening check on these instruments. With the incredible levels of your peak MPO, your output there, you wanna make sure that we're not causing any additional hearing loss to any of our hearing care practitioners that are

listening to these instruments. A great little tip is to, whoever your vendor is for all of your tubing supplies, you can actually purchase filters from them to put a filter into your listening tube to make sure that is a safe level for your listening activity. So, let's get into sound that's natural. The sound VMA platform from Sonic brings together our most powerful, automatic, adaptive and flexible hearing aid technologies. Built into our products for patients with severe to profound hearing loss, Trek offers the benefits of the Sonic 4S Foundation. Here we'll discuss our features that relate to sound that is natural. More power, control and access to everyday sounds.

With Trek, we are, as I've mentioned I think probably 13 times now, we're gonna deliver a natural sound quality with several different technologies, using exactly what our end users need. We have our Speech Variable Processing which you will see shortened to SVP in this presentation, which also deploys SmartCompress. We have our Adaptive Feedback Canceller Pro, our AFC Pro, which it's just amazing. We introduced that AFC Pro with our captivate product offering and it just continues to dazzle me how impressive the system works. We also deploy Frequency Transfer, Extended Dynamic Range and SmartMusic that we'll be chatting about today. You know as Sonic's most powerful hearing aid offering for gain and output, Trek meets the need for robust sound amplification for those with severe to profound hearing loss. Our unique digital signal processing strategy ensures the sound is clear and natural, something Sonic has been known for for ages. Speech Variable Processing, or SVP, does this by addressing the need for optimum time and frequency resolution. SVP measures and applies gain to wide band acoustic signal without breaking the input into channels. It also provides two selectable amplification strategies, important for the individual needs of this population of users. Again as one of my favorite phrases to use here at Sonic, you are the expert. Our hearing care professionals, without hesitation, you are the expert. No one knows your patients better than you. And we deploy phoneme focus as well as envelope focus as two different strategies that you are able to select within the EXPRESSfit Pro fitting system software. The defaults will be

selected based on a variety of factors, but again, you can adjust them as needed. So the phoneme focus will offer maximum audibility of all the fine details and speech signal, rapidly adjusting the gain to apply the precise amount of amplification for each phoneme. Envelope focus is really designed to support patients who rely on information from the speech envelope, applying less alteration to the amplification of the speech signal, preserving the envelope for greater contrast between phonemes. There's a big important difference, or offering I should say in the Trek instrumentation that you are able to select as the clinician. As the signal to noise ratio, the SNR of listening environments changes from one moment to the next, Trek 80 further optimizes SVP with SmartCompress, the breakthrough, adaptive compression system from the Sonic SoundDNA. This is designed for complex, really challenging listening environments. This feature accurately detects the short and long term SNR in changing listening environments in order to really overcome the challenges of traditional compression and noise.

It's a completely configurable adaptive compression system, and this is a big reason of why you'd want to look for Trek 80 as an upsell, at Trek 80 the features in this product over the Trek 40. SmartCompress has been, we have deployed a few series of products and really it's unique in how it handles the compression is impressive. You know, it's effective, it's adaptive and it is, we like to say, it plays well with others, which don't we want everything to do that way. This solution provides, you know, it specifically is addressing the problem of applying compression and noise. You know all DSP's out there in the world with all the manufacturers, they're developed for a quiet environment. I don't know if you knew that. We have a tremendously awesome white paper that I reference just shortly, in a few minutes, but all digital signal process, DSP's out there, again are created for quiet, but how often are our patients, as we have more active listeners that are seeking amplification, they're in very noisy environments. So SmartCompress really delivers and effective solution. It's adaptive and it overcomes the limitations of a fixed environment classification system. You know, environment

classification systems that when we deployed that technology was great. It did a very good job, but we've kind of broken that barrier and moved forward with SmartCompress. And finally it plays well with others. It complements SVP, directionality and noise reduction. You know at Sonic, we've always had this layering technology and SmartCompress does exactly that. You can select any fitting rationale of your choice and you can rest assured that SmartCompress is going to deliver the most optimal solution for your end user. So you may be wondering, well how does it do it? You know SmartCompress helps to improve the quality of sound coming out of the device, the output SNR. By limiting the amplification of noise following short pauses in speech, or even between speech phonemes. In environments without speech, it applies less amplification to the incoming signal. The resulting clear, cleaner, amplified signal offers many listener benefits, such as listening comfort in noise, improved ease of communication and overall our natural sound quality back to our 4S Foundation. Here you can see that the SmartCompress is using two SNR level estimators. You have your green, which in this diagram here, it's kinda tricky to see on a small screen, but you've got your green fast phonemic estimator and your blue slow long-term estimator, and both of these systems are working together providing accurate measurement of environmental changes in a real time system.

So again, SmartCompress controls the compression in speech and noise by adaptively varying the compression in that speech and noise environment. It'll determine how much the compression has to be decreased or made more linear, for a less noise in the output. It also controls gain in the non-speech environment, which is something we often don't think about because again, speech is king in everything we do, but sometimes that speech isn't present. So how do we handle the gain? Well, it's gonna adaptively limit the gain when speech is not present, and it'll determine the occurrence of quiet and noise-only situation applying less gain to the input. Therefore, that's all about comfort. And I've always said for ages, if you're not comfortable in your hearing instruments, there's a problem. So this really gets that sound that's natural and really

helps that comfort factor of amplification. Flexibility by design, SmartCompress enables you to select your patient's preferred settings in each listening program. There are two controls that allow the fine tuning. We have compression control, adjusting the amplification balance between the audibility of speech and comfort for speech and noise situations. Well, we have gain control reducing the program amplification if no speech is detected. So, important to note, SmartCompress does not activate in this example here where speech in quiet. But, here we go with SmartCompress and gain control with the very low SNR. You have your quiet and your noise only environments, so no speech is present. We want SmartCompress via the Gain Control to apply less gain to the incoming signal. So this, again, greater listening comfort in non-speech listening environments. In the Trek 80, you have two options here with this feature, you have medium and off. Again, that's configurable within the EXPRESSfit Pro fitting system. Finally, we have our low SNR, like speech-in-noise environments here. Here we have this SmartCompress via the Compression Control is going to reduce compression, minimizing the amplification of noise following the short pauses in between speech or even in between phonemes. This therefore improves the output SNR, Signal Noise Ratio. And it supports speech and listening comfort in complex environments.

To note, in the fitting software, you can select comfort for the most linear response, audibility for those who tolerate more noise. We all have those patients out there, or balanced for an optimal mix between comfort and audibility. And I strongly, strongly encourage you, we have had various courses on audiology online regarding our SmartCompress and regarding our SoundDNA technology platform, but we have a tremendously wonderful white paper, written by my colleague Tara Helbling, and it goes through all the nuts and bolts on the SmartCompress and you can find that on our website at www.sonici.com. And it is the Sonic Spotlight Technology paper about SmartCompress. So hearing aids for demanding losses, they flat out require more power, which increases the risk of feedback. This is something that our industry has

struggled with for ages. The Trek on the SoundDNA Platform address this concern head on by offering effective feedback cancellation for your high gain fittings, so patients can live with fewer distractions. Adaptive Feedback Canceler Pro, or AFC Pro, uses two systems to control feedback more effectively in a variety of listening situations. This technology, again this algorithm is exclusive to our 2019 products on the SoundDNA platform, and it has been just an incredible eye opener. I am going to go ahead and play a video here, another animation that tells you all about the AFC Pro.

- [Narrator] The Sonic SoundDNA Platform makes everyday sounds better, with Adaptive Feedback Canceller Pro. Also called AFC Pro, this innovative feature uses two anti-feedback technologies to create one proficient system. Let's see how they work together to reduce the risk of feedback. When an incoming sound reaches the hearing aid's microphone, it gets amplified and sent through the receiver into the ear. Sometimes the microphone pics up the amplified sound after it's left the receiver. That sound is amplified another degree and the process repeats, turning the sound into an unpleasant squeal called feedback. That repeating cycle of sound between the receiver and microphone is called the feedback path. Sonic's Adaptive Feedback Canceller already monitors signals to see if they've been amplified before. If so, they anti-feedback system estimates the sound's feedback path and sends a counter signal to cancel the repeated sound. This breaks the feedback path. This system works well in stable situations when it can estimate a sound's feedback path, then match it to the actual feedback path in the ear canal. However, feedback can also occur when the feedback path is more unpredictable. Quick movements near the hearing aid, like putting on a hat or making adjustments to the device, can also trigger feedback. In these cases, the system can't respond fast enough and the estimated feedback path doesn't match the real feedback path. Sounds that fall outside the predicted feedback path are picked up from the receiver and start to amplify. SoundDNA with AFC Pro now includes a second system to control feedback from rapidly changing feedback paths. This new approach is called spectro temporal modulation, or STM Processing.

As sound enters the hearing aid, STM Processing detects feedback from dynamic conditions and applies momentary attenuation only in the specific frequency bands of the feedback. The STM system rapidly eliminates feedback signals from dynamic conditions, while the traditional anti-feedback system cancels feedback from static conditions. Together these two systems are called AFC Pro. Let's compare graphs with and without this technology. Here is a spectrogram of a hearing aid's output without AFC Pro. The acoustical feedback is shown in red. This spectrogram shows the same hearing aid's output with AFC Pro. The acoustical feedback that was in red, is gone. With the new technology, nearly all audible feedback from the output has been eliminated. AFC Pro removes offending feedback signals, often before they are even heard. The patient enjoys a reduced risk of feedback. AFC Pro is easy to use in the fitting software. First, place the hearing instruments in the client's ears directly and ensure background noise is not present. Click measure to run the measurements, then choose accept to apply the measured feedback margins. Listeners will appreciate the advantages of this two in one system. AFC Pro means fewer distractions from the annoyance of feedback, whether in stable or changing conditions. Soft speech sounds are more audible for a better target match and because it reduces feedback that can come from motion near the hearing instrument, AFC Pro delivers more open-fit possibilities. Listeners can hear the sound of their own voice in a more clear and natural way. With the advanced feedback management system of AFC Pro, patients enjoy a truly individual hearing experience. The SoundDNA Platform is one more way Sonic Technology makes everyday sounds better.

- [Erin] Just before I came into this course today, I was speaking with a customer who has been very much dazzled by our AFC Pro. And I asked him specifically, what is it about the system that you appreciate the most? And he said the fact that I never have anyone say anything about feedback, yet I can still give them the adequate gain that their hearing loss requires. He said, it's just a game changer Erin. It's just a game changer. And it really put things in perspective for me of how impressive this two in

one system truly is. So the AFC Pro, you know it significantly reduces the occurrence of feedback in those fast changing conditions which were in so more and more, but it also offers a better target match for improved audibility of soft speech sounds. You know, those are the tricky phonemes, the tricky sounds that our hearing impaired, especially severe to profound, they struggle with. So here we're able to really provide and incredible listening experience for such an important population. AFC Pro works to alleviate many problems related to acoustic feedback in order to maximize the full use of the fitting range provided by the instrument. This is available in our Trek 80 and our Trek 40 in both the Super Power and Ultra Power offerings.

We have another really awesome, terrific, if I could throw in some more adjectives I would there, but another white paper available, again on www.sonici.com. We also have done courses on this feedback cancellation system specifically. But the title of this white paper for those of you who are interested, is the Sonic Spotlight on Technology paper on AFC Pro. So I encourage anyone who's interested in learning more about that to go ahead, take a look at the white paper, but also feel free to call and have a conversation with anyone in our audiology team as we would be more than happy to walk you through the system itself. When a complete loss of function of inner hair cells occurs, within a certain area of the cochlea, it's known as a cochlear dead region. In these cases, the ability to hear the soft high frequency consonants that are crucial for speech intelligibility, is reduced. This poses challenges, but not just to the listener, but also to the hearing care professional treating that individual. But with Sonic's frequency transfer, professionals can help those who have difficulty receiving high frequency signals from their hearing instruments. So frequency transfer, which is I would say, not necessarily a brand spankin' new feature, but it is new to our Super Power and obviously our Ultra Power, which this is our first Ultra Power we've ever offered, but it is new to this technology. Frequency transfer copies and transfers high frequency input to a lower frequency region. By sending this input to a region with better residual hearing, frequency transfer helps patients hear more speech cues for

better consonant identification. In the destination here, we have 10 different destination regions with seven intensity settings, and we also offer high frequency attenuation. When it comes to destination, this is where we adjust the source and destination ranges. The intensity is going to adjust the strength of the high frequency sound, so the source, when mixed with the low frequency sound, which is the destination. And guess what, we have another white paper. Again, this title of the white paper is the Sonic Spotlight Technology Paper on Frequency Transfer and this is also found at www.sonici.com. Our white papers, it's unbelievable the amount of click throughs that we actually get. We get that data reported on our website. We can't see who is doing it, but our white papers have really taken off lately.

We've had a lot of people calling and inquiring. We've had a lot of students as well learning more about this incredible technology. Sounds loud and clear, exactly what we desire. Available in the Trek 80, this is our extended dynamic range, which expands the dynamic range of sounds up to 113 dB SPL. I always tell my team, this icon here, I always say it's the raise the roof 'cause we're gonna extend it, we're gonna reach up to the sky. It's an advanced feature to keep loud sounds clear in challenging listening environments. And it's specifically designed for signals with a high intensity. You know listening environments with speech, they can get incredibly loud, and it can, intensity can change very rapidly. The presence of loud speech signals can have peaks that exceed 95 dB A, and that's on an A weighted scale. You know, the problem though is most digital hearing instruments out there limit input at 95 dB SPL. So what happens is, you unfortunately get this distortion product. You get a created distortion for higher input levels due to compression. It's there for a reason, but sometimes you need that. You need that specific signal. So as sounds grow in intensity, EDR ensures clarity will remain. This feature is especially helpful if you think about a movie theater, a performance, a live performance, any place where there's sudden dramatic sounds that really can make the moment. That's where EDR really sets itself apart from other instruments that don't have this feature. It'll expand to the growing sound levels only as

needed. So it's not like it's always constantly staying there, it expands as it needs to. And the upper limit will depend on the input level of the speech signal. And it can change anywhere between 95 to 113 dB SPL. It allows those loud peaks to be amplified with less risk of distortion. Again, that everyday sounds, it really gives the fidelity and improves the overall fidelity of the signal. This is available only in the Trek 80. So this is an advanced feature that the Trek 40 does not offer. So another feature, much like SmartCompress that really separates the 80 from the 40. Live music at its best. This is a special feature for the Trek 80 instrument and it's designed for all music enthusiasts. It's optimized for attending indoor and outdoor live concerts and consists of four components that really make it unique.

So SmartCompress has four different components. It has our fixed extended dynamic range, which increases the limit at the input to a fixed 113 dB SPL. We also deploy speech variable processing which is going to maintain the balance between the different harmonics. We have wideband frequency response which is really important for perceived naturalness, the natural sound quality of music, and we have different controls. Now here we have our fixed hypercardioid polar setting, which is the setting that you want for a music setting or music program. The position of the null does not change, and it really eliminates noise from behind. So again you're attending a concert, you're facing what you want to hear and you are allowed to concentrate what is on stage. SmartMusic anticipates the swell of live music and extends that dynamic range of sound to that fixed level, helping the listener hear music signals clearly, whether they are listening to something live, a performance, or even a recording. We have been pleasantly surprised how wonderful music enthusiasts out there have benefited from our SmartMusic technology in our hearing instruments. And Trek, getting to deliver this tremendous music feature for your severe to profound users, I'm just absolutely delighted with. So, our second S now, we've covered sound that's natural, let's dig into speech understanding in noise. More speech, less noise in more places and attention to detail. With Trek, Sonic delivers what life sounds like in noise. And you know, it just

dazzles me whenever I'm at a public event, how noisy our world is. And I always wonder, gosh I hope people that have hearing loss are wearing our Sonic technology because of SPiN Management, because of binaural management, impulse noise reduction, soft noise reduction, wind noise reduction, Tinnitus SoundSupport, our VC step size in the Trek. These are all major, major features that can make life so much easier. So more speech and less noise. Give patients with severe to profound hearing loss an extra edge when it comes to hearing and noise. Speech in Noise Management, or SPiN Management is an advanced noise reduction system incorporated in the SoundDNA Platform. It includes up to three adaptive features that improve speech understanding and noise compared to previous technology. SPiN Management offers better speech understanding in noisy listening environments, setting to reduce background noise at different SNR levels and personalization to meet patients preferences in noise. Guess what? Really surprising, we have another white paper to share with you.

This is the Sonic Spotlight Technology paper on SPiN Management, which can also be found on our website www.sonici.com. We also have courses on audiology online regarding SPiN Management specifically. But today we'll just do a quick preview of SPiN. So again, SPiN Management has SPiN Directionality, SPiN Noise Reduction and SPiN Engage. So we'll talk about each specific little topic there. So SPiN Directionality, you know with the goal of improving the signal to noise ratio, SPiN Directionality automatically activates in response to environmental noise. This adaptive directional microphone system uses null steering to select the microphones' polar patterns that will reduce the optimal SNR in 16 independent frequency bands. SPiN Noise Reduction, as we switch gears here. SPiN Noise Reduction is Trek's fast acting modulation based noise reduction algorithm. It reduces steady state background noise, such as the common drone of traffic, fans, HVAC systems, busy restaurants or parties. SPiN Noise Reduction is adaptive and automatically responds to the changing and challenging listening environments. This means it's gonna reduce only as much as

needed, as the SNR fluctuates, it's a super important feature. It operates in 16 independent frequency bands, just like the SPiN Directionality, this system attenuates noise across the same frequency range. So we have two systems, SPiN Directionality and SPiN Noise Reduction working to really evaluate that SNR. Now we've got SPiN Engage, and this is a Trek 80 only feature. Hearing aid users will have different preferences for how much noise they are willing to accept in their listening environments. SPiN Engage determines at which SNR the directional and noise reduction systems will adjust to the environment. So you can think that it actually, it engages directionality and noise reduction and coordinates things. Personalize Trek to adjust the level as needed for your patient, again you being the expert of the end user that you are fitting. On medium and low, the system's gradually engaged as the noise level grows. On high, the system is engaged at the onset of soft local noise. So you have a lot of flexibility as you want to fit your specific patient. Less noise in more places. The wireless technology in Trek 80 provides balanced sound to users who make experience uneven noise from side to side. Again, noisy, noisy, noisy world. Binuaral noise management wirelessly detects unequal noise levels that affect one side more than the other. It compares the levels at each ear and automatically reduces the loudest source of noise for a more balanced sound.

Again this is available, an advanced level feature, it is available in our Trek 80 and really provides that equal balance for two ears for your patient. I like this slide. Nobody wants noise. No one wants noise, especially hearing aid wearers. We want, they just, noise is a really tough thing to struggle with. And the system's that we've discussed today, really do a great job making sure that SNR is in check and exactly what we need to do for our specific patients. But, we have a few more features that really make a big difference. Impulse noise reduction is gonna lessen the discomfort of loud, sudden sounds. We have soft noise reduction which is gonna reduce those low-level sounds. Think of, like right now, it's real quiet. I can hear our HVAC system on in my conference room right now. If I'm a hearing aid wearer and I'm having sound amplified, that could

be very much problematic constantly hearing something. So it's important to have a hearing instrument that can provide soft noise reduction in a comfortable level. Wind noise reduction, no one likes, I mean wind on a microphone can be brutal. With the Trek instrumentation though, the wind noise reduction is gonna adjust to outside activities by monitoring the environment and preventing that rush of wind from being amplified. So these are three important features in my opinion, that really make a difference from the comfort factor, again speech understanding and noise. When noise is present, they're gonna be comfortable in their hearing instruments. Sounds of relief. Tinnitus is a challenge. I personally have tinnitus, and I can tell you every single day I wake up, and it's like you hope it's not gonna be there, but it's there. Patients with severe to profound hearing loss may encounter and additional auditory challenge when it comes to the ringing in their ears. With Trek you can enhance your practice with innovative technology that supports your patients with tinnitus. So tinnitus sound support aims to reduce your patient's perception of tinnitus by providing amplification and generating sound relief options at the same time.

Available with up to four different listening programs, this feature can be activated for patients that need it. Again, you are the expert. Nobody knows your patient better than you. But more impressively, it can be customized with sounds that vary in level and frequency content per the program. We have another white paper available for you. It's called Tinnitus SoundSupport, Sonic Technology paper on our website, www.sonici.com. With the Tinnitus SoundSupport in the Trek offering, we offer four different broadband sounds. We have white noise, pink noise, red noise and we can also shape to the audiogram. We also have three nature-like sound settings: Ocean One, Two and Three. Completely controllable via the app, we have our Sonic SoundLink 2, which is our app that is used with our Trek instruments and you can adjust the tinnitus sound level or mute it entirely. You can also modify the tinnitus sound by changing its modulation rate or frequency response right there on the app as you can see from these screen shots. So a lot of flexibility you have right at your

fingertips. Attention to detail, our VC step size. You know Trek's double push button allows your patient to easily and intuitively adjust the volume with just a short press. The top button increases the volume and the bottom button lowers the volume. Pretty easy. Additionally, the volume changes can be made wirelessly via your remote control or the Sonic SoundLink 2 app, especially convenient for patients with dexterity issues. Finally, if the audible volume control and/or LED light indicators are activated in the fitting software, Trek will emit a sound and/or blinking signal if the volume changes reaches the maximum volume, reaches the preferred volume, helping patients manage their own sound experience. So you have a lot of flexibility again within the EXPRESSfit Pro fitting system to configure that instrument exactly how you want your patient to experience their sound. The VC step size is designed as a control for loudness growth issues. The VC step makes finer adjustments in a 1 dB increment instead of a 2.5 dB increment as a lot of competitive instruments in the marketplace do. So it's great for those people that have the reduces dynamic range which is very common for patients with the severe to profound hearing loss. Simplicity in all we do. Trek delivers solutions that just make sense, it's logical. We've talked about feature benefit to value earlier and this is where it all comes together. We have our dual-radio system, SoundLink 2 app, which we eluded to earlier.

We offer IFTTT, low frequency enhancement, binaural coordination, and impressive IP rating, and our absolutely fantastic EXPRESSfit Pro fitting system. So welcome to the world of wireless. Severe to profound hearing losses shouldn't hold listeners bound. Trek keeps up with the ways patients interact with their world, letting them control a variety of wireless operations via the program button, smartphone or any other accessories available from Sonic. This impressive and intelligent dual-radio wireless technology, this system is smart. It's just smart. And it employs the 2.4 GHz technology so patients can stream audio directly to Trek via their iPhone or connect to other wireless devices. It also incorporates NFMI, that near field magnetic induction, providing fast ear to ear communication and optimized battery life compared to other

2.4 Ghz hearing systems in the marketplace. As you can see here, we have an impressive connectivity portfolio with a lot of different things right at your fingertips. I'd like to highlight a few today. We have our SoundClip-A, that's on the far right hand side. The SoundClip-A allows patients to stream sound in stereo to track from any bluetooth 2.1 smartphone or device out there, including iPhones and Android phones. This versatile accessory also funtions as a remote mic to give to another speaker for clearer conversations, and as a convenient remote control that changes programs, adjusts the volume and even more. The TV adapter, which is kind of up on the upper left hand side there, the TV-A, this is gonna play TV audio directly to the hearing aids without an intermediary transmitter. So patients can enjoy high quality digital sound stereo from their favorite shows, movies and entertainment. It connects to most TV's and at home pairing is easy, simple and fast. We have a course that goes through all the different connectivity options, but the TV-A is probably the easiest to connect to. It's literally turn it on with your instruments, put your instruments, you open and close the battery door to put them into pairing mode, and it goes ahead and pairs. It's so user friendly, it's just a great system. In the center in the middle of the top there, we have our RC-A, our remote control.

And this is a nice, small remote, and it's small enough to even fit in your pocket or purse and let's your patient adjust volume, change programs and control connectivity sources like the TV-A. This is a great solution for people that aren't interested in a lot of bluetooth connectivity. One thing to note with the SoundClip-A, Trek hearing aids can be also used as a wireless headphones for hands free telephone calls. Pairing the SoundClip-A with the Phone Adaptor 2 then also enables users to stream landline phone calls directly to their hearing aids. You can see in the picture there it says TV-A and Phone Adapter 2, the box looks exactly the same, but we do offer the Phone Adapter 2 for all of 12 people out there in the world that still have a landline phone, but it is definitely an option for connectivity. When we take a look at the SoundLink 2 app, here's where we're gonna control wireless options, like program and volume change. It

is compatible with iPhone or Android smartphones, and you have a lot of conveniences, such as Find My Hearing Aid, advanced Tinnitus SoundSupport controls, battery life indicators, there's a whole lot to the app of what you can do. Talking about the app, let's talk about some smart technology. I had previously mentioned that we have IFTTT, and that is if this then that brings the internet of things to Trek. Before when we wrote this presentation, there were more than 600 internet-connected devices and services available in the marketplace. So you may wonder, how is Trek connected with it. Well, Trek can connect with smart devices, again on the internet of things, through the SoundLink 2 app an the IFTTT service. By doing so, Trek's able to synchronize events, such as turning on sound connected lights, turning on the hearing aids in the morning or text message alert could be sent if the hearing aid battery is low. The possibilities genuinely are endless. My best suggestion is spend some time, get some instruments and create your account on IFTTT and become comfortable with it. It's our reality moving forward, and as I find with clinicians, there's a lot of clinicians out there that are a little bit nervous and not sure how to work with it. Embrace this technology, because people are really taking advantage of it.

Deep bass, that's a mouthful, deep bass dynamics. This is our low frequency enhancement and really just gives a boost into those low frequency signals. This is wonderfully important for audio streaming for a high fidelity signal, to really give it that natural sound quality. With low frequency enhancement, we again are gonna improve the deep bass dynamic for your patient while they stream audio from their favorite devices by adding impact to music, movies and entertainment. It's on by default in all Trek models and all technology levels. Essentials that are truly essential are available in Trek, including binaural coordination. Again, getting two ears working as one. We also have binaural synchronization that if an adjustment is made ear level one, it makes the adjustment on the other instrument. And we offer our non-telephone ear control, again reducing gain or muting the input on the opposite device that someone is using a

telephone on. It's a really wonderful and helpful feature. Personalized sight and sound. You know Trek offers different LED light and sound indicators to help visually show and confirm the hearing aid status. I alluded to this previously, but you can pick and personalize the indicators by frequency, by level, by cycle to match your patient and/or caregiver preferences. I think this is such a neat feature, and I was really excited when I learned more about it. There is a microphone service check and this is a great tool. So the LED will show four red long blinks repeating four times with small pauses in between, and the audible indicator that happens is actually eight beeps and it will report four times. If that ever happens, you wanna go ahead and make sure you send that instrument into us for service 'cause that means something is wrong. I think it's a really helpful feature. Impressive protection. I alluded to this earlier. Man Trek, it's fantastic. Patients with severe to profound hearing loss typically use their hearing aids more often and longer than the average user with maybe a mild loss.

Again, because this is a fundamental need of amplification. This means that they're gonna be confident in knowing that their instrument offers robust protection against dust and water as they go about their lives. More protection than ever. Our Ultra Power and Super Power instruments with Trek offer and IP68, which is considered dust-tight and protection against continuous immersion in three feet of water or more. Would I ever say that hearing instruments are water proof? No. 'Cause you just shouldn't go swimming with them. It's a little, little computers. Something you wouldn't want to do. But rest assured, if your patient jumps in the lake, and then realizes, oh my gosh I've got my hearing instruments in, the hearing instruments can handle that type of exposure without hesitation. Tools and tricks of the trade here. EXPRESSfit Pro is just a software that makes sense, is easy to use and incredibly intuitive. We offer several different fitting rationales, the default with this Super Powered ultra fitting is going to be DSL 5, which is logically what we would like, but we do offer NALNL 1, NALNL 2, our proprietary algorithms, best fit fast and best fit fast SE. Also available in this software is the adaptation manager, data logging, transfer fitting, real ear fit, which is a great

system, especially anyone who's using that IMC2 to communicate, that's wonderful. Noahlink wireless was on our previous connectivity portfolio, it is without hesitation the best in class when it comes to wireless programming. And we do offer SoundStudio for people that have a sound system set up in their office. SoundStudio is awesome. If you have a great speaker array, it is just fantastic. I'm always dazzled and impressed with the systems that are available. Style that stands out. Trek is stylish by design. With two models and up to six colors to choose from, Trek can be configured to appeal to severe to profound hearing loss patients. All Trek devices include the standard dual-radio system, wireless technology and are equipped with the telecoil and have IP ratings of 68. When you take a look at our model overview here, everything that you can imagine that you would desire in a Super Power and Ultra Power is configured here.

Your Super Power will offer a size 13 battery where as the Ultra Power does offer that 675. Both models offer wonderful and impressive battery life. Fusing form and function, Trek's Super Power and Ultra Power BTE's offer everything that you are looking for for your severe to profound population. Again, as I mentioned, we have six different colors available. We have our beige, brown, gray, black, red and blue offerings. You may wonder why are we offering a red and a blue? Well, we offer a pediatric care kit. So this is an updated pediatric kit and it is available with a variety of different accessories for the caregiver as well as the child. Included in the little tote bag that everything comes in here, there is a drying and cleaning set, cleaning cloth, a listening tube, a hand puppet that's a lion, a safety cord and care guide booklet with instructions for the caregivers. There also included in the bag is a small set of markers that you can color and decorate your bag itself. We also offer the EduMic, and Trek supports all wireless accessories available, including this new product called the EduMic. And it is designed for use in modern classrooms. It offers a transmission range for classroom coverage, one-to-one communication, has incredibly long lasting battery life to last an entire day at school. This instrument, also Trek itself does work with and is compatible with other

FM systems and audio inputs for additional flexibility. The accessory is available with our sister company Odocon if you are at all interested in the EduMic offering. So, our reasons to believe. Clearly, I think this product is fantastic, but the reason I do is 'cause with increased power and less audible feedback, we know that we're helping patients hear the sounds they were previously unable to hear. Our patients are engaged in more conversations, connections and experiences, and with advanced connectivity that Trek offers, reliability and style, Trek's giving users the confidence they need to experience more of everyday life. Thank you, thank you, thank you, thank you, thank you. I am so, I'm always humbled that people will join me and spend an hour of your busy day to go through and discuss and learn about our newest product, Trek. If you have any questions, simplicity at its finest, we have one number to reach anyone in our organization. That number is 888-423-7834. And we have a wonderful email address should you have any questions. It is support@sonici.com. There is a whole slew of information on our website at www.sonici.com. Our SoundDNA Platform in Sonic where everyday sounds better. Thank you so much! Again, my name is Erin Reichert. If you want to reach out to me directly, I am always ready and willing to help in anyway I can. Thank you so much everyone. You have a great rest of your day. Take care.

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