Dual Radio: Stay Connected

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Partner: Sonic

- [Sarah] Hello and welcome to the Sonic Course, Dual Radio: Stay Connected. My name is Sarah Rank, and I am with the Sonic Audiology support team. Throughout today's course, we're going to discuss the various technologies and the various capabilities within the newest devices available from Sonic. We're gonna take a look at the various type of wireless connections, the devices within the connectivity portfolio that Sonic offers and the connections available. We're gonna also look at the pairing and unpairing processes and the Sonic SoundLink 2 app and connection to the IIFT network. This course has three main learning objectives. First, describe how the dual-radio system uses two separate wireless technologies and the purpose of each. Second, how to pair compatible Sonic hearing aids containing dual-radio technology to a variety of wireless products. And lastly, explain how Sonic hearing aids with dual-radio technology can access the Internet of Things or the IFFT network via a smartphone. So, I wanna begin by looking at the advanced wireless capabilities within this dual-radio system. What does dual-radio even mean? And more importantly, what does dual-radio mean for you and for your patients? Essentially, the dual-radio system is one that enables fast and direct wireless transmissions with optimized battery life. These wireless transmissions occur via two different wireless systems with each having specific capabilities and purposes.

So Sonic devices themselves, our current product offerings are powered by the SoundDNA platform. Again, this technology is available in the Enchant, the Captivate and the Trek product lines, which will take a brief look at in just a few moments. This chip itself carries increased processing power from previous products and the ability to not only offer your patients exceptional sound processing features but also exceptional connectivity options. These options are designed to meet the ever growing and changing demand of the modern consumer as they seek out hearing aids that do more than simply help them here better. The patients that you serve today differ greatly from those who consulted with you five to 10 years ago and they are are also much different from those that will consult with you five to 10 years down the road. A hearing aid must

advance with the times and continue to increase its offerings with relation to features in both sound processing and connectivity. Sonic offers three main benefits on the new chip featuring the SoundDNA. First, we find both 2.4 gigahertz Bluetooth connectivity and a power efficient NFMI protocol. These lead to dual-radio transmissions with no significant increase in battery consumption. Next, there is a high transmission rate of sound, data leading to improved sound quality for those signals being streamed to the hearing devices. And third, the presence of 2.4 gigahertz direct streaming, allowing streaming of sound without the use of an intermediary device. So, let's circle back for a bit. When we say Dual-Radio Wireless Technology, what exactly does that mean? Essentially, this is a system that has two different types of wireless systems integrated into one hearing aid. We have the NFMI or Near Field Magnetic Induction, working for short distance, ear-to-ear type of transmissions and then the 2.4 gigahertz working for long distance direct-to-hearing aid transmissions.

To better understand what each system is and what each system does, we will take some time to look at each a bit deeper individually. We're gonna discuss its purpose and then also how it operates within the Sonic product line. We first have Near Field Magnetic Induction or NFMI, which we recognize and know well as ear-to-ear wireless transmissions. This system transmits only over a short distance, so approximately the distance of the width of the head, and it also has a very high transmission rate. This system will be active for features such as push button controls and binaural synchronization of volume and program changes. NFMI also aids i binaural coordination, which is a feature available to enhance directional and noise reduction features, aiming to give your patients the most beneficial settings for increased speech understanding, even in the most difficult listening environments. Next, we look at the wireless system enabling direct to hearing aid wireless transmission of both sound and data. This is a 2.4 gigahertz Bluetooth system. This wireless system allows for a connection to devices such as the iPhone, the iPad, TV adapter, SoundClip-A, and also to external remote controls without the use of again, any type of intermediary device.

The exchange of sound and data can occur over longer distances. However, even though the transmission range is a bit greater, we do encourage maintaining a line-of-sight connection in order to avoid any form of interference of the signal being transmitted. Sonic has an extensive portfolio of devices which make use of this dual-radio system. Through the use of the 2.4 gigahertz Bluetooth technology, we see how the possibilities have opened up for you to meet the growing connectivity demands and needs of your patients. Sonic offers a phone adapter too for connection to landline phones. The TV-A, which allows for direct connection between the hearing aids and to television, the RC-A which is a simple wireless remote available for program and volume changes. The SoundClip-A, which is a device that functions as a wireless connection between various Bluetooth-enabled devices and also as a remote control and a remote mic. Direct streaming to compatible iPhones and iPads and iPods and then a feature-filled SoundLink 2 app connecting to the IFTTT network. And then we also see wireless programming capabilities available via the FittingLINK 3.0 and also the Noahlink Wireless.

So, we look at this dual-radio connectivity. Sonic offers a wide range of custom and behind-the-ear products that are truly designed to meet the various needs and demands of your patients. So with all the product lines available, what devices are the features that we have been discussing available in? And what products and technology level support the use of this dual-radio system? This slide shows the five wireless technology levels available through Sonic. From entry level to premium, you are able to offer your patients both NFMI and 2.4 gigahertz Bluetooth connectivity in both custom and behind-the-ear products. So as mentioned, we're gonna take a brief look at each of these individually and then what product and form factor offerings have this dual-radio connectivity. First, we look at Captivate. Captivate offers this dual-radio system standard in all technology levels and all form factors. With Captivate, you will have a 60, 80 and 100 technology levels available. And the NFMI and 2.4 is standard in all styles. Enchant, Enchant offers a full line of wireless styles, both custom and

behind-the-ear products from entry level with Enchant 20 to Premium level with Enchant 100. This product offering has dual-radio technology available in all levels and with the NFMI available from CIC through BTE and 2.4 available in ITC through BTE. So again, you can see that in the behind-the-ear products, these features are standard, with the custom products, they are optional within again, 2.4 down to ITC and NFMI optional down to a CIC. Lastly we have Trek, Trek is Sonics newest superpower and ultra-power BTE offering. Trek comes standard with both NFMI and 2.4 gigahertz Bluetooth technology. Trek truly makes wireless connectivity available to those patients even with the greatest of hearing losses, making connections within reach and enabling you to expand Bluetooth offerings to those with severe to profound hearing loss. Circling back a bit. We now know that dual-radio technology refers to both the NFMI and to the 2.4 gigahertz connections available in our current hearing devices. NFMI is the wireless ear-to-ear connection that operates exclusively between two hearing aids identified as a binaural set.

On the other hand, we have 2.4 gigahertz Bluetooth connections, which refers to the connection between the hearing aids and an external device for the purpose of streaming sound and, or data. We're gonna take a deeper look at each of the aspects of this 2.4 gigahertz Bluetooth connectivity. We're gonna look at how it operates and the devices available for use. First up, let's take a brief look at streaming phone calls. So by now, we have all heard the term MFI. MFI refers to Made For iPhone, and indicates that the devices can seamlessly connect to an iPhone, iPad or iPod via Bluetooth connection for the purpose of streaming. This connection allows for streaming of phone calls, streaming of music and the streaming of video, audio directly from your phone, iPad or iPod into the hearing aids without the use of an external device. With this type of connection, there is approximately a 32-foot transmission range and it is recommended to maintain line-of-sight between the devices in order to keep a strong signal and to keep any interference in signal quality at bay. So, we're looking at this MFI connection. We're gonna see essentially three different transmission

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protocols that allow for this transfer of sound and data. We have a standard Bluetooth Low Energy protocol or BLE, the 2.4 gigahertz proprietary long-distance protocol and the Apple Bluetooth Low Energy protocol used in the Made For iPhone connection. So let's take a moment to look at each of these three different Bluetooth protocols in detail. First, we have the standard Bluetooth Low Energy protocol. Again, sometimes referred to as BLE. This Bluetooth protocol allows for transmitting data only and is utilized for connections to devices such as the RC-A which is our standard remote, the FittingLINK 3.0 and Noahlink Wireless for programming and also volume or program changes via the SoundLink 2 App. Next up is the 2.4 gigahertz proprietary long-distance protocol. This protocol is utilized when connecting to the TV adapter and transmits both data and sound information. And lastly, the Apple Bluetooth Low Energy protocol. This protocol transmits data and sound between the hearing aids and Apple products.

The standard Bluetooth Low Energy protocol or BLE. With BLE, data is transmitted in both directions and it allows the hearing aids to be connected to devices such as the RCA, allowing for the hearing aid and remote to exchange information for volume and program changes. And then also the FittingLINK 3.0 and the Noahlink Wireless sending fitting parameters to and from the fitting software and allowing for wireless detection. Then we also have connection to the Sonic SoundLink 2 app, which is available for both iPhone and Android, transmitting information such as program settings, VC and program adjustments, and also battery status. The 2.4 gigahertz Proprietary long-distance protocol allows for the transfer of data in the form of volume changes and sound which is streaming of the TV to and from a Sonic TV adapter. This connection is between the hearing aid and the adapter and therefore no external device or use of a loop is necessary. With this connection, there is approximately a 50-foot transmission range but again, it's recommended to maintain line-of-sight since obstructions can easily disrupt the signal being transmitted. And then next up, we see the Apple Bluetooth Low Energy protocol, allowing for transmission of data and sound

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between your Sonic hearing aids and an Apple iPhone, iPad and iPod. With this connection, you can stream audio directly from your phone, which is going to include phone calls, videos, music, et cetera, and you're able to use the iPhone as a remote control even without the use of the Sonic SoundLink 2 to app. This Bluetooth protocol has a 32-foot transmission range and again similar to the others, line-of-sight is always recommended to maintain the best connection. So thinking back on these different types of protocols and the devices available, we can see how vast the connections are and how much the availability of these connections truly does open up a world of connectivity to your patients. However, we can also see the limitations that may present to patients with Android phones and to those devices that have Bluetooth, but they do not contain the necessary Apple operating system.

Specifically with Android phones, we're able to utilize the SoundLink 2 app for remote control purposes, but what about streaming? What about phone calls, music, videos and the ability to have the sound from these devices stream into the hearing aids? And this is where we are going to see the Sonic SoundClip-A come into play and be useful. The SoundClip-A allows for connection to various Bluetooth devices and truly does help to bridge that gap. So streaming can happen with alternate Bluetooth enabled devices, again, other than your Apple products. The SoundClip-A is essentially an intermediary device that allows for the connection of the hearing aids to devices containing the Bluetooth 2.1 protocol for the purpose of wirelessly streaming audio. The SoundClip-A also serves as a remote control and as a remote mic. The device itself is very discreet and it's very small in size. Unlike other intermediary devices, there is no lanyard required. The SoundClip-A is a small device that clips discreetly to your patients shirt and delivers excellent sound quality. So when we're looking at the SoundClip-A, it's truly almost like a Swiss Army Knife of devices. It's a multifunctional tool that's going to prove useful in a variety of situations. All packaged in a very small and discreet piece of equipment. You're able to make connections to Bluetooth phones for streaming of phone calls and use of this device enables your patients to

utilize functions such as voice dialing and call reject. The SoundClip-A can also be connected to Bluetooth-enabled devices for the purpose of listening to music. SoundClip-A can also be used as a remote control for volume and program changes. It serves as a remote mic to help your patients perform better in crowded and difficult listening environments. And lastly, it can connect to computers and laptops via Bluetooth allowing for streaming of audio. The next device I wanna take a deeper look at is the TV Adapter or TV-A. TV Adapter allows your patients to stream directly from their television to their hearing aids containing the Bluetooth 2.4 protocol. So, I'm looking at the TV-A, it enables a connection between the television and hearing aids and again, utilizes that 2.4 gigahertz proprietary long-distance protocol for the transmission of both data and sound. This streaming is direct and in digital stereo sound. The TV-A allows for multiple devices to be paired and to stream simultaneously and this is very useful if multiple family members have hearing aids, as they will not each need a separate TV Adapter.

An unlimited number of pairings is supported by the TV Adapter. However, it's important to remember that the hearing aids themselves can only be paired to and streamed from one TV Adapter at a time. Therefore, if your patients have a situation where they have multiple TV Adapters within their home, they will need to essentially repair their hearing aids to the target TV Adapter each time they change location. With direct streaming, the TV-A, there's a transmission range of about 50 feet. And again, it can vary depending upon obstructions. While streaming, your patients are able to control the volume of the TV via push button, use of the app and or use of the remote control via the RC-A or SoundClip-A. For those familiar with previous generations of Sonic products, it's important to note that the TV-A is not compatible with the SoundGate or those products that utilize the SoundGate for streaming or connection to external devices. Again, the TV-A streams in digital stereo sound providing enhanced streaming sound quality, vastly improved user experience. Compatible hearing aids are paired directly with the TV-A and it is important to note that once paired, a television

program is automatically added to the available programs within your patients hearing aids. This program does not need to be added within the software, but will become available for use once the pairing is complete. Access to the TV program is done through the push button and this has to be enabled for program change within the software or the use of a remote control via the RC-A, SoundClip-A or SoundLink 2 app. The position of the program depends on how many programs are already in your patients hearing aids. So for example, if your patient only has one listening program, the TV streaming program would fall into the second program in rotation. If your patient should have four presets, then the streaming program will fall to the fifth spot in rotation. And then also just to note, where is the patient's listening programs are indicated by beeps. So they'll get one beep for program one, two for program two The TV streaming program it's indicated by a low-high tone, which will advise them that they are now in the correct program for streaming to occur. And then again while streaming, the patient can utilize push button, remote or app to adjust volume or to mute the hearing instrument microphones. Next up is the RC-A, we have already mentioned this device at various times already.

But again, the RC-A is just a very basic remote control that connects via Bluetooth. The RC-A connects to the hearing aids via 2.4 gigahertz Bluetooth Low Energy protocol. And like the TV-A, the RC-A is not compatible with any Sonic products that support the SoundGate. The RC-A is an easy to use remote that functions to increase and decrease volume, mute the hearing aids and change programs on the hearing aids. It is a great tool for those patients who don't have or who don't want the app and also for those who might have some difficulty utilizing the push buttons for program or volume change. The RC-A is paired with the hearing aids outside of the software and has about a six-foot transmission reach. The devices powered by two quad-A batteries and these batteries can easily be replaced by your patient or in your office as needed. For those familiar with previous generation remote controls, the RC-A looks identical to the RC-N. However on the back of the remote, you'll see it clearly marked RC-A. So

you can differentiate that this is the remote that is compatible with the 2.4 products. So, we talk about various Bluetooth connections and a number of different compatible devices. So when we talk about this, it's inevitable that the question of how are these devices connected will come up. Each device does have its own pairing process. So, I do wanna take some time to quickly review each. However, one thing in common with all the devices in different processes is that pairing is completed outside of the fitting software. Therefore, you do not need or want to be connected to EXPRESSfit Pro when trying to pair any type of an external device. And actually, if you are connected to the software, especially via the FittingLINK 3.0 or the Noahlink Wireless, this is going to preclude the hearing aids from establishing a second Bluetooth connection until that connection with the programming interface is essentially ended. So again, you do not want to be in the programming software. An integral step of any external pairing is to place the hearing aids into Bluetooth pairing mode. In doing this, we are essentially making the hearing aids visible to the other device and allowing for them to be found as an available Bluetooth connection. So, I wanna briefly review entering Bluetooth pairing mode for both non-rechargeable and then also the lithium-ion rechargeable hearing aids.

For non-rechargeable hearing aids. We first wanna ensure that we have relatively new batteries and that programming in the software is complete. Note that you have to program the hearing needs together in order for any external devices to view them as a binaural set. Once we've done this, we open and close the battery doors and listen for the startup tune. Once that startup tune is ended, the hearing aids are now in Bluetooth pairing mode for about three minutes. For rechargeable hearing aids, utilizing the lithium-ion battery. We again wanna ensure an adequate charge and completed programming within the software. However from there, the process does vary slightly since we are not able to readily open and close the battery compartment. There are two options for placing rechargeable hearing aids into Bluetooth pairing mode. First, you can place the hearing aids into the charging unit until the indicator lights turn on

and then take the hearing aids out of the charging unit. This will reboot the hearing aids and once you hear that startup tune, the devices are in Bluetooth pairing mode and ready to be found. Or you can utilize the push button to restart the devices manually. To do so, you simply press and hold the push button for about five seconds, you'll hear the indicator tone indicating that the hearing aids are shut down, and then you press and hold again for five seconds to reboot. And then once that startup tune is heard, the hearing aids are in Bluetooth pairing mode and ready to be paired. Pairing and unpairing cell or mobile phones is nearly a daily occurrence, I'm sure in most of your offices. Whether it be initial pairing of hearing aids or troubleshooting connectivity. Having a basic understanding of how to connect hearing aids to both the iPhone and Android devices is very beneficial. We're gonna take a look at each separately, since the process does vary quite a bit based on the phone's operating system.

So first, we're gonna look at iPhone. In looking at this process, I do want to note that the process I'm going to describe is accurate as of iOS 13.3. And I think just yesterday we got an indication that 13.3.1 is now available. As you've all experienced, this process is subject to change at anytime with a future iOS update through Apple. So if you're viewing this course other than today, it could look different depending upon the iOS on your patients phone. So, just kinda wanted to make a note of that because it does change every so often. So currently, you're gonna go to Settings and find Accessibility, and you can see the depiction of the icons here on slide. Once you're in Accessibility, you're gonna scroll down and touch on Hearing Devices. Once here, place both hearing aids into Bluetooth pairing mode by either opening and closing the battery door or rebooting the hearing aids. The hearing aids are in Bluetooth pairing mode for a few minutes and the phone is gonna need to find them. Once the phone finds them, they will show up as Not Connected. So typically whatever you program the patient's hearing aids as in Noah, so typically the patient name is gonna show up and then Not Connected will show up next to it. To finalize this connection, you're gonna touch on the name and approve any Bluetooth pairing requests. Once this is

complete, the hearing aids will show as Connected. At this point, remote control functions will be available by navigating to the Hearing Devices section. Or you can perform a triple click on the Home or the side button depending upon the device. The hearing aids will automatically be recognized in the SoundLink 2 app once a complete connection is established in the phone itself. Just a few side notes here, only one set of hearing aids can be paired to the phone at a time. So if they have another set of hearing aids, like a spare set or a spouse's set or anything like that, you'll have to forget the connection on one in order to connect to another pair. Two devices can be connected only when programmed within EXPRESSfit Pro as a binaural set. Therefore, we've had a lot of questions on this where couples they cannot pair the phone to a left aid of one and a right aid of another because again, it's not recognizing it as a binaural set. If you get a patient who their hearing aids are listed instead of left and right, left is listed on one line, right is listed on another, that is again, because Phone is not recognizing it as a set, so you will only be able to connect to one of those devices at a time.

Another note is that if a connection is desired on an iPad, the process is identical. But again, keep in mind that only one connection can occur at a time. Therefore, if the hearing aids are currently connected to the iPhone, you will need to interrupt the connection in order to pair to the iPad. This can be done by either putting the iPhone into airplane mode or temporarily turning off the Bluetooth. And then once you turn off the Bluetooth on the iPhone, the hearing aids are able to be connected on the iPad. Once you have that initial connection, the hearing aids essentially have what we call a friendly Bluetooth connection with the phone. So, what this means for your patient is that if they do turn off the Bluetooth and pair with their iPad and then wanna go back to their iPhone, they just have to cut the connection with the iPad and the iPhone is going to automatically recognize those hearing aids. They don't have to go from step one with the pairing process So again, just one connection at a time with those iPads and iPhones. To unpair, the current process is to go to Settings and then to Accessibility.

From here, touch on Hearing Devices, you'll see the connected devices as being listed. You wanna touch on the name of the devices which will take you to the next screen and then scroll to the bottom and choose Forget this device. The hearing aids are now removed from both the MFI settings and from the Sonic SoundLink 2 app. To pair an Android device, it's important to ensure that the pairing is completely done through the SoundLink 2 App. Therefore, you must have the patient download and install the app prior to pairing. And you do want to ensure that the phone's Bluetooth is turned on. Once the app is downloaded and installed and on the phone, open the app and place the hearing aids into Bluetooth pairing mode. I do recommend positioning the hearing aids about six to eight inches away from the phone for the best connection, you truly can be too far away and honestly you can also be too close. Sometimes people have a tendency to just place the hearing aids on top of the phone and nine times out of 10, if you are having difficulty, if you just simply move the hearing aids about six inches away, that connection will then take place. So when you're trying to pair, you just wanna follow the onscreen instructions via the app and approve any pairing requests that come through.

Again, it's important to initially pair via the app and not the phone Bluetooth settings. If you do so, this is going to interfere with connection on the app itself. A note here is that Android connections with the app tend to be a bit slower. And often what's going to happen is they will show as connecting and disconnecting multiple times until a full connection is finalized and then indicated as being completed within the app. So just be patient, keep the hearing aids within six to eight inches until that final connection is established. To unpair from an Android phone, kind of the opposite of pairing. For this, you are going remove them in the phone's Bluetooth settings. So to do this, you press and hold the Bluetooth icon to show Connected or Available Devices. And then once the Bluetooth settings are open, you find the hearing aids, again, typically listed by the patient's name and you touch on the Gear icon found next to the patient's name. You will select Unpair. And this will now cause the hearing aids to show as Unavailable

Device but not Connected. You wanna do this for each hearing aid and then once they will show as Available but not Connected, you turn off the Bluetooth just for a moment and then back on again. Hearing aids will now disappear and they'll no longer show as Connected or Available. So, we made it through the phone pairing. So now, I wanna take a look at the process for SoundClip-A. My best advice for the SoundClip-A pairing is to have the user manual handy. I know a lot of people kind of don't like to use the user manual or tend to just kinda put it to the side. But again, the SoundClip-A is like a Swiss Army Knife of devices. It does many different things and it shows various different types of light configurations.

So again, the best and easiest process is to just follow the manual step by step as you go through the pairing of the SoundClip-A to the hearing aids and then to any type of external device such as a phone for the purpose of streaming. So quickly, to pair the hearing aids to the SoundClip-A, you wanna power the SoundClip-A off by pressing and holding the large or what we also call the multifunction button, for approximately six seconds. Both indicator lights on top of the device will now be off. You then wanna place the hearing aids into Bluetooth pairing mode via the process that we discussed earlier. You'll then turn the SoundClip-A back on. You do this by holding the large button for about three seconds and you'll see a solid green and a flashing yellow light. Those lights indicate that the SoundClip-A is turned on but it is not connected to any hearing aids. The SoundClip-A will now search for available devices and once it connects to the hearing aids, that blinking yellow light is gonna turn to a solid yellow. Again note that the SoundClip can only be paired to one set of hearing aids at a time and the devices must be programmed together within the software because they do need to be indicated as a binaural set. So typically, once you've got them paired to the hearing aids, the next step that the patient wants to do is pair this SoundClip to their mobile phone. So to do this, you're going to hold the large button and the VC Up button down together for about five to six seconds. From here you're going to see that solid yellow light turn to a blinking blue and that's gonna again indicate that the

SoundClip is in Bluetooth pairing mode. So you'll have a solid green and a blinking blue. SoundClip is now visible to devices and in Bluetooth pairing mode for approximately two to three minutes. On the phone, the SoundClip will show up as an Available Device under Bluetooth settings. You simply touch on the name and approve a pairing request. Once connected to the phone fully, that blinking blue light will turn solid blue. And again now, you're gonna see a solid green and a solid blue light indicating that it is connected and ready to stream audio through their hearing aids from the connected device via the SoundClip-A. For the TV-A and RC-A, we're gonna review the pairing process and then I'm gonna show you a brief video demonstrating the same process. Again, the pairing takes place outside of the programming software. And this can be done in office or sometimes we do have it done by the patients at home.

Because again, very, very simple pairing process. So first, let's look at the TV-A. The TV Adapter has a very, very simple pairing process that can be done by either you or your patients. You must plug the TV Adapter into a power source and you'll initially see two fading or blinking blue lights. At this time, you're gonna wanna place the hearing aids into Bluetooth pairing mode and just simply set them on top of the TV Adapter. When you observe two solid blue lights sits down for about 30 seconds, the pairing is complete. So important here is that once those two solid blue lights come on, you do wanna wait about 30 seconds until the light now turns back to red. That will indicate pairing is finalized and it's complete and it's safe for the patient to move the hearing aids away from the TV Adapter. The TV Adapter is now ready to be plugged via the appropriate cable into the television and ready to stream audio. So now what I'm gonna do is I'm gonna show you a brief video on how to pair the TV-A. Again very, very simple process. So you can see that this TV-A works only for Sonic 2.4 gigahertz. So you do wanna make sure that you have compatible Captivate, Enchant or Trek devices. You see the two fading blue lights, hearing aids are placed into Bluetooth pairing mode. And now we'll wait for those two lights to go solid. And now the pairing is

complete. So, to unpair the hearing aids from the TV Adapter, you essentially must perform a system reset on the TV Adapter itself. To do so, you press and hold the red button on the backside of the TV Adapter until you again, are able to see two fading or blinking blue lights. Important thing to note here is that this will remove all stored pairings from within the TV Adapter. We really can't indicate, I wanna remove set one versus set two. It does essentially just clear the TV Adapter in and of itself. So again, real simple process here. So again, 2.4. So the Sonic, the Enchant and the Captivate devices and the Trek. So, that system reset button is on the back and you just wanna hold it for about five seconds. You see it's a red light right now and then it's gonna turn to those two fading or blinking blue lights. So, that was a TV-A. So now we're gonna look at the RC-A which is the external remote control that's going to allow your patients to adjust volume and programs with the touch of a button, completely wireless product.

So, pairing to the RC-A is truly just as easy as using the device. To pair the RC-A, you want to place both hearing needs into Bluetooth pairing mode and keep them within six to eight inches of RC-A. Once you hear the startup tune within the hearing aids, press and release any button on the RC-A to complete the pairing. Solid green light will be visible to help confirm that the pairing was successful. Again, there's no need to open the software or confirm this pairing within EXPRESSfit Pro. So very easy process for pairing that RC-A. And again, noting that you can only pair it to one set of devices. They do have to be programmed together within the software. So, just placing those devices into Bluetooth pairing mode. Once you hear that startup tune, again, it's just a press and release. You do not wanna press and hold, press and release. And then you get that solid green light showing that the pairing is complete and you are ready to go. So, our next step is unpairing. So with the RC-A, you can only pair it to one set of hearing aids at a time. So, if your patient has a repair come in or replacement or if for some reason the connection is lost and they can't utilize the remote anymore, what we need to do is we need to completely clear the RC-A of Bluetooth connections. To do

this, you need to press all three buttons down simultaneously and hold for about five to six seconds. The status light goes green for about 10 seconds and then when it goes out, it indicates that all connections are gone. So our last little video, let's just take a look on how to unpair the RC-A. So again, just pressing them down simultaneously. And it's very important that you don't push it down like a one, two, three push, they really do need to be pushed down simultaneously. That green light goes on. And then we are good to go. Now that green light's off and it indicates that it's ready to pair to any other devices. So, the last piece to our connectivity puzzle that we're gonna look at today is the Sonic SoundLink 2 app. Not gonna go into great detail, we do have another course coming up, which is going to go into greater detail regarding the app, but just a very quick overview of the app and some of its main features.

The Sonic SoundLink 2 app is available on both Apple for iPhone and iPad, and Android devices. This app serves many functions to include things such as modifying the Tinnitus Sound Support Program, making program or volume changes, checking battery status. Utilizing that Find My Hearing Aid function, access streaming programs for external devices like the TV-A, RC-A, not RC-A, that doesn't stream, SoundClip-A and then also to access the IFTTT network or the If This Then That. Again, we're not gonna go into great detail, but I just wanna take a few moments to briefly review the app and then some more of the prominent uses. So, perhaps the most basic yet useful feature of the app is enabling your patients to utilize their phone as a remote control for their hearing aids. The Apple directly allow for program changes. You can see from the remote control option, it's accessible via the home screen, they are able to view active programs, view available programs and then also change their current listening program as needed. Available programs will be listed across the top with the active program highlighted in a darker blue color. To change programs, you simply swipe to scroll through the list and then touch on the desired program which then automatically changes programs in the attached hearing devices. The app also has options available for volume adjustments, your patients can increase and decrease volume and also

mute their hearing aids with just a single touch. Based on the phone settings, these volume changes will either be made for each hearing aid individually or the changes will occur binarily. Another feature of the app is to access streaming programs such as the Remote Mic program for the SoundClip or the Streaming program for the TV Adapter. You can see in this slide how that Remote Mic program. Obviously, it's connected to a SoundClip-A. So, it was added to the end of the program list and is now available for your patient to utilize. Again, once connected to the external accessories, those streaming programs will show up as Options across the top and be placed at the end of the program list. Once your patient places their hearing aids into a streaming program, volume adjustments can be made to both the streaming levels and also to the amplification of surrounding noises that are coming in through the hearing aid microphones. So, your two options here; you have Remote Mic and then Surroundings.

Again, Surroundings essentially means what amplification is coming from the hearing instrument microphones. So, they can turn down the environment without affecting streaming levels. Another prominent feature of the Sonic SoundLink 2 app is the availability of Tinnitus Options. These options are available through the app to those patients who have an active Tinnitus Sound Support program. This program must be added from within the EXPRESSfit Pro software by you and all changes that the patient makes will be based on the settings prescribed. So again, there are some adjustments that the patients can make but they do all kind of get based on your prescribed settings. The app allows for volume changes to be made to both the Tinnitus masker or that sound that you've put in and also to the amplification coming in through the hearing instrument microphones. So you have noise and surroundings, with noise being the Tinnitus masker and then Surroundings being the actual external. In addition, there are advanced options available for adjusting noise variations, which is essentially the modulation of the sound and adjusting the noise equalizer allowing for your patients to make changes to bass, mid-range and treble parameters of the preset

Tinnitus masking signal. At anytime the patient is able to reset to programming defaults by touching on Restore Defaults. Yet another feature of those hearing aids available with the dual-radio connectivity is the ability to connect to the Internet of Things. This is widely known as a IFTTT or If This Then That. We are not going to go into great detail regarding this, that could be an entire hour course on its own. But I do just wanna give a very brief overview of the feature available through the SoundLink 2 App, a feature that really does allow connections to various internet-based services. So here we are, we are connecting hearing devices via the If This Then That internet service. The service relies on an internet connection, which is typically via Wi-Fi, and is truly expanding the capabilities of hearing devices and their connection to other modern devices. The phrase Internet of Things is gaining popularity and makes perfect sense that today's hearing devices are both a part of and accessible to this network. So what is it? If This Then That is an internet-based service that joins hundreds of internet connected devices and services otherwise known as the Internet of Things. Within this network, you can create recipes or applets that will include a trigger and an action. These triggers and actions are determined by the device or by the app being utilized. And again a little side note, just like with the iOS system with Apple, it's important to note that what IFTT is today will vary from what it is tomorrow.

Nearly each day a new device or company is joining and expanding the capabilities of this network. With Sonic, this feature is available for all devices equipped with a 2.4 connectivity. It's available via the SoundLink 2 app on an internet connected smartphone or tablet. IFTT itself is separate from the SoundLink 2 app and therefore to access, your patient is going to need to set up an account and maintain internet connection when running any type of applet. So, how are hearing aids connected with IFTTT? Through several pieces within the equation and each must be complete before utilizing the features. You have hearing aids connected to the phone, phone connected to the internet and then IFTTT is a service that connects applications. So here's a quick example of a recipe or an applet. Essentially this notes that when the sun goes down,

which is the trigger, then turn on the lights, the action. To utilize a recipe such as this one compatible weather app such as Weather Underground needs to be installed and then the patient must also have compatible light bulbs in use, such as like the Philips Hue for this to kinda communicate and work with each other. Sonic devices are on the IF network via the Go Service and the Go Service is the interface between the Sonic devices and other services on IFTTT. So, here you can see a listing of various triggers and actions available through the Go Service. Again Go Triggers, a Trigger is going to be the first part of the If This Then That equation. So, if the program is changed then something happens or if the hearing needs are powered on then this happens. Go Actions are that second part of the IF equation. So, let's say if I enter a certain area, basically done through an app, then I'm gonna set a program. So maybe when they get home at night, they wanna change the program to a specific program. So again, various Triggers and Actions available on the Go Service. Examples of Applets using a Go Trigger. If the hearing aids batteries are low, then send a text message. And then an applet using a Go Action would be just as we described, like when we arrive at work, you're going to set that proximity then change the program in my hearing aids.

When you sign into the Go Service, this is going to be what you see as far as choosing your Go Triggers and Actions. Again, these are subject to change, some can be added, deleted, et cetera, from this list as time proceeds. So again, this is what it's going to look like when you create it. Go Service is kind of the one that created the app, the Action and the Trigger. So, what are the benefits of IFFT? In essence, it keeps hearing aids connected to this growing internet-based world. It keeps hearing aid technology in line with where other consumer goods of this type are headed. And as your patients become more tech savvy and they have an increased interest in utilizing these additional features, it is going to be important for you to be able to, at least offer these options and offer the benefits of these options. So, let's circle back a bit to Sonic devices in this dual-radio connectivity. Again, you can see this growing conductivity portfolio from phone adapters, TVs, remote mics and sound clips, wireless

programming apps and remote controls. Truly, the connectivity portfolio is constantly growing and changing. Sonic offers Bluetooth connectivity options on both behind-the-ear and custom products, standard wireless features for behind-the-ear devices and then a range of optional wireless features for custom products. Connectivity allows for features such as direct streaming via iPhone and iPad, with no intermediary device. And then we also have a SoundClip-A that allows for streaming from other Bluetooth-enabled devices and also allows for hands-free use of phone with iPhone or Android and then a remote mic function. Process of pairing with these devices is easy and connections offer hassle-free individualization to your patients, keeping them connected in today's modern world. I wanna thank you for attending today's course, contact information is on this slide and if you do have any questions or you do want further information on any type of Sonic products or Bluetooth connectivity, please feel free.

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