THE BRAILLISTS FOUNDATION

BRAILLECAST PODCAST EXTRA 38

Braille on iOS

1st February 2022

Matthew Horspool: Welcome back to Braillecast Extra. Coming up this time, the first of a three-part series on using braille with iOS. This session was recorded on Tuesday, 1st February 2022 and introduced by Dave Williams.

Dave Williams: Hello. A very warm welcome back to the Braillists Foundation and welcome to our series of braille Masterclasses concerning braille and Apple iOS devices. This is the first of three sessions that will be covering in quite some detail how to get the best with your braille device and your iOS device when those two things are working together, to get access to a massive range of content. Leading us through that will be Scott Davert. Some of you might know Scott's name from AppleVis, where he has written extensively about braille and iOS. Scott also regularly reviews braille displays, new braille products coming onto the market and those reviews are always well worth a read. They regularly get posted to the Braillists forum and do appear in some of the US magazines such as AccessWorld and so on.

We've got about a 35 minute presentation from Scott which is pre-recorded, so we're going to play that for you now and then at the end of that segment, we will be coming to questions and answers. So, take it away, Scott Davert.

Scott Davert: This is Scott Davert welcoming you to this set of Masterclasses on using braille with iOS devices.

I first want to start off by thanking the Braillists Foundation for having me come on to present this particular set of sessions and would also like to thank everyone for tuning in.

A little bit about myself before we get into the actual class. I am the coordinator of the technology, research and innovation centre. That’s a technology centre for individuals who are deaf-blind and I am located on Long Island, New York. I've been in the AT space for well over a decade at this point. I feel really old, by the way. I have been working with braille displays since, well, since the 90s anyway.

This particular session is recorded due to a scheduling conflict, however there will be a live Q&A at the end of this session. This session will focus on the very basics and we'll go through the VoiceOver slash Braille menu as well.

You might have noticed that this is a recording but it is not polished and that is for a reason. I am not going to do editing on this particular recording, so if something happens, for example if I'm in the middle of doing something and the braille display crashes, well, then the braille display crashes and I'll have to try to work thought that. I hope it doesn't happen that way, but I understand that it could and that it does happen to people.

So, just like this is not a polished presentation, iOS and braille is not a polished experience. So, please, just bear that in mind. Certainly if I was recording a podcast, I would probably have a more smooth delivery but I really feel like this is something that should be done in such a way, I know it isn't live, but that it basically is.

So, first a little bit of general information. Most braille displays are supported through Bluetooth, that have been made in the last 15 years or so, going back as far as the first generation of Brailliant, which didn't have a keyboard. It was a very nice construction though of solid aluminium. That was, I believe, 2005, 2006, when it was introduced and that can be paired with your iOS device. The only display that I know of that is around that age that is not directly supported is the BrailleNote mPower.

Now, the BrailleNote mPower works with the Mac. You can plug it in. I don't know if you can do Bluetooth but you can certainly do USB with it. But it is not supported on iOS.

By the way, for this set of demonstrations, I'm using iOS 15.3 on an iPhone 12 Mini with a Brailliant BI 20.

First, let's look at the actual pairing process itself. The Brailliant BI 20X, Brailliant BI 40X, Mantis Q40, Chameleon, and NLS eReader are the only displays I know of which are currently supported with USB. It's my understanding that the Braille One does not work but I do not have one here to try myself, so I've no way of verifying that.

If using an iPhone, you will require a Lightning to USB Camera Adapter which is available through Apple for US $40. There are cheaper off-brand models but sometimes those don't hold up over time, so I don't typically recommend those, but if you would like to take a chance on a cheaper one, you could just type in Lightning to USB Camera Adapter on, say, Amazon or any other retailer and buy at your own risk.

Anyway, with the USB, you plug the Lightning cable into the adapter. Then you'll plug the Lightning adapter, the other end, into a power source and that's required because a braille display requires a lot of power, although it's not required on the iPad, the newer iPad Pros.

The other port on that side of the adapter is a USB A cable. What you would do then is plug the USB A side of it, in other words the end of the port that would go into your computer or a power brick for charging, you'll plug that into the USB to Lightning Cable Adapter and then the other end would go into the USB C port on your braille display.

Braille display support on iOS through USB is very much in its infancy. In fact, there are several issues with the connection, in the sense that when you lock your iOS device's screen, and then unlock it, you'll find that in a lot of cases the braille keyboard no longer sends its keyboard commands to the iOS device successfully. So, what you'll need to do in that case, if and when that happens, is either unplug the braille display and then plug it back in; you could also restart VoiceOver; and in the case of these particular braille displays, you can go into the Terminal mode and then go to Reconnect Devices, and that should also work, but it’s very much in its infancy, like I said, and still requires quite a bit of work before it's ready for prime time. But if you want to try it out and mess around with it, that would be how you would accomplish that.

Bluetooth, which is what is more commonly supported, is that system that we talked about, where I said pretty much all braille displays were supported.

Now, let's go onto the pairing itself through Bluetooth. This is going to depend on what braille display you have, how you would proceed. For example, some braille displays, you'll need to put the display in what is called Terminal mode or Discoverable mode. Others, you don't have to do anything other than turn the display on and then proceed to what you need to do with the iOS device. So, I would recommend very highly you check out the user documentation.

For example, a lot of displays you would pair by going to Settings, Accessibility, VoiceOver, Braille and then pairing it that way. But there are other devices that only require you to go into Settings and then Bluetooth. Some displays that require you to go into your Settings, Accessibility, VoiceOver, Braille menu include the Focus 5th Generation, well, the 4th and 3rd Generation for that matter, whether it's a 14 or a 40. You'll also need to do this with the QBraille from HIMS and several other older models of display, you will have to go to VoiceOver, Braille under the Accessibility Settings and pair that way.

This is also true of the Orbit Readers, but there is an additional step on the Orbit Reader 40 which you have to take at this point, which is to go into the braille display's menu itself and turn on Emulation for the VarioUltra 40 and then when you pair, it will actually show up as a VarioUltra 40 and not an Orbit Reader 40. The reason this is done is so that users of these displays don't have to wait for screen reader support to be officially given to the Orbit Reader 40, so all of your commands still work and I don't really notice too many differences between using the Orbit Reader 40 on iOS and, say, a Brailliant BI 40.

Now, I'm going to use the iPhone to connect to the Brailliant BI 20X. That's what I'm going to use for this particular demonstration.

I have turned the device on and have gone to Terminal, and then I'm going to use whatever option I want, either the thumb keys or space with dot 4, there's all kinds of ways to get there, and press Enter on Add Bluetooth Device.

Now, on my iPhone, I am going to open Bluetooth Settings and I can do this on the touch screen by going to Settings and Bluetooth, or I can save myself a step by using Siri which is what I'll do.

Open Bluetooth Settings.

Synthesised Voice: Settings, Blue, Settings, button.

Scott Davert: Now we are in the Bluetooth Settings and what I need to do is swipe right a lot of times until I find the Brailliant BI 20X. I'll do that.

Synthesised Voice: Bluetooth, Bluetooth, all, now discoverable as my devices, heading, Bluetooth Logitech keyboard not connected, button, action not available.

Scott Davert: That's obviously not it.

Synthesised Voicei: Other devices, heading, in progress, heading, to pair an Apple Watch with your iPhone, go to the Apple Watch app link.

Scott Davert: Okay, well, we don't need to do that so it has not showed up in the scan yet. It does sometimes take a little bit of time to do that. Let me flick to the left now to see if it showed up.

Synthesised Voice: In progress, heading.

Scott Davert: It did not.

Synthesised Voice: To pair an Apple Watch with your-- link. In progress. Other devices. Heading. Bluetooth Logitech keyboard not connected, button. Actions available.

Scott Davert: So, what can I do? I told you there was going to be a problem. There always is.

Synthesised Voice: Other. In progress. To pair an Apple Watch with your iPhone, go to the Apple Watch app link.

Scott Davert: So, what I'm going to do, and this is oftentimes something you have to do, is restart the Brailliant. That'll be the first thing I try. I'll go ahead and shut it down. It will take a minute or so to restart.

That's one of those things where, in an ideal world, it'll come right up and they'll recognise each other and in this case you'll just double tap the braille display and it will work. Now, with the Brailliant supporting the new standard, sometimes that's a little more of a challenge than, say, on a Focus display.

Okay, it's restarted. I'll go to Terminal again, and I will go to Add Bluetooth Device and let's see what happens on the iPhone.

Synthesised Voice: Link, in progress, head, other devices, heading.

Scott Davert: So, I am going to now use the iPhone to go back.

Synthesised Voice: Airplane mode, off.

Scott Davert: I'm in the Settings main menu. Let's go back to Bluetooth, which is one swipe to the right.

Synthesised Voice: Wi-Fi, [UNSURE OF WORD], 159, button.

Scott Davert: I lied, it's two swipes.

Synthesised Voice: Bluetooth on, button.

Scott Davert: Double tap.

Synthesised Voice: Bluetooth on.

Scott Davert: Let's see if it comes back up now. I'll tap near the bottom of the screen so it will hopefully get me into the area where the Bluetooth scan has given us some results.

Synthesised Voice: To pair an Apple Watch with your iPhone, go to the App-- Brailliant BI 20X, 65002000306, button.

Scott Davert: There it is. It has not been connected, of course.

Synthesised Voice: 65002000306, button. Brailliant BI 20X, 650.

Scott Davert: That's a new one. It keeps repeating what it is, even though it's the only thing here. Anyway, so now that I have the Brailliant BI 20X in focus, I'll double tap it.

Synthesised Voice: Brailliant BI 20X, 65002000306 [CHIME], connecting. TV, Samsung 7 Series, 50, button.

Scott Davert: So, there was a TV that I'm not going to connect to, but it has connected and you heard the little chime noise which I guess I would normally associate with a wrong answer, but anyway.

So, I'm going to get out of here with a two-finger scrub.

Synthesised Voice: Bluetooth on, button.

Scott Davert: And the reason I'm getting out of here is because Bluetooth is constantly scanning for devices and it'll keep interrupting me.

So, we're apparently connected. Let me go on the Brailliant to Connected Devices.

Synthesised Voice: Cellular, button.

Scott Davert: And indeed we are connected. I hit space with dot 4 which will take you to the next item on the screen, but let's now go to the braille menu [CHIME].

Open VoiceOver Settings [CHIME].

Synthesised Voice: Accessibility, back button.

Scott Davert: Now I need to find braille. I pretty much know where that is.

Synthesised Voice: Speech, button, braille, Brailliant BI 20X, 65002000306, button.

Scott Davert: Okay, so we had there a close guess on my part. I flicked one item to the right and there it is. So, if I want to activate this time, there are multiple ways to do this and the way that you'll do it, will depend on what's available to you.

For example, on the Orbit Reader 20, we don't have cursor routing buttons, so you could press the Select button or you could hit space with dot 3 6. I happen to have cursor routing buttons, so I can just press a cursor routing button above Braille.

Synthesised Voice: Output, contracted, button.

Scott Davert: Output is your first option, output meaning what you're reading, so what you can do is configure that to any code you want, whether that's contracted braille, six dot uncontracted braille or eight dot uncontracted braille.

So, if I wanted to activate this, again, to activate any item, I can press space with dot 3 6, hit a cursor routing button, or, of course, I could double tap on the iOS device, but I'm not using my iOS device at all anymore. Other than establishing the pairing, I haven't used it.

What you can do, of course, to go to the next item, is flick right one time on the touch screen. On the Mantis, you can hit your right arrow. On a Perkins keyboard, which is the majority of devices on the market still, you would press space with dot 4, and space with dot 4 might be a familiar command for you, because it's the same command you would use to go to the next item on a traditional braille note taker. So, I will hit space with dot 4.

Synthesised Voice: Input, contracted, button.

Scott Davert: We have input also set as contracted. Now, if I hit space with dot 1:

Synthesised Voice: Output, contracted, button.

Scott Davert: I swipe one item to the left.

So, what I'm going to do is just sort of walk through the menu here and explain what the different options are and, again, in Masterclass number two and of course in Masterclass number three, we'll work on things like text editing and web browsing and things of that sort, all depending on how much time there is.

I'm on output again. We know to the right is input, but do we know what keyboard command to hit to move to input? If you said, space with dot 6, I'm very sorry, you'll need to go back and re-listen to that part of the podcast. It is space with dot 4.

Synthesised Voice: Input, contracted, button.

Scott Davert: I already covered that. The only other thing I will mention in the Input menu, input being what you're typing, is that there is an automatic braille translation option in this menu and the automatic braille translation option, when turned on, will not wait for you to hit the space bar to interpret your typing, rather it will try to interpret automatically and it does an okay job, but once you get into certain situations, it's pretty ugly.

Space with dot 4 to move onto the next option.

Synthesised Voice: Braille screen input, six dot, button.

Scott Davert: We're not going to discuss braille screen input but there it is as an option if you would like it.

Synthesised Voice: Braille tables, two, button.

Scott Davert: Braille tables. Braille tables are typically used when you want to use multiple languages or multiple codes in the same language, depending on your preference or what your needs are. So, if I wanted to look at this menu, which we'll do, I can again hit space with dot 3 6. If I'm on an Orbit Reader, I could also hit the Select Button. Or on any other braille display with the keyboard which has cursor routing buttons, I can press a cursor routing button.

Synthesised Voice: Selected braille table, English unified system, button.

Scott Davert: Okay, so we have the English unified system braille table in use at the moment. If I move to the right one option with space and dot 4:

Synthesised Voice: English, unified system button.

Scott Davert: Space with dot 4 again:

Synthesised Voice: English US, Liblouis, actions available.

Scott Davert: We have English US, Liblouis, English US, of course, being the old code that was done away with in 2016 here in the US, which is no longer a thing, but you can still change to that table if you want. Although the two tables I have listed in this demonstration are both English, there are also tables for many other languages and we'll get into this in part two of the Masterclass series.

There is also, by the way, English UK braille, so if you're someone who hasn't really wanted to adapt to UEB in the UK, that table is also available to you.

Space with dot 4 again:

Synthesised Voice: Add braille table, button.

Scott Davert: And now we have the Add braille table and the Add braille table is an option we'll explore a little later. Again, this is more an overview of all the options that we have available, and then beyond that, space with dot 4 again will get information that I basically just told you.

Synthesised Voice: Braille tables added here will appear in the braille table rotor in VoiceOver.

Scott Davert: So, you have the ability to add the table in here. You can also change it. Or you can use it within the rotor and we'll get into how to use the rotor with braille in a little bit, probably session two.

So, if I want to get out of here, space with B for back or it also doubles as an Escape key, I'll press that.

Synthesised Voice: Add braille table, button. Output, contracted, button.

Scott Davert: And we're back to the Output, contracted menu which isn't exactly where we wanted to be, but it's close. I can hit space with dot 4, or any number of different commands, depending on what you're using, but space with dot 4 should work on any Perkins keyboard.

Synthesised Voice: Input, contracted, button.

Scott Davert: There we have input.

Synthesised Voice: Braille screen input, six dot, button.

Scott Davert: I'm just moving to the right.

Synthesised Voice: Braille tables, two, button. Status cells, button.

Scott Davert: Status cells, I have turned off. Basically what it will do is it will take the left or right two cells that you have and can communicate certain information to you, for example, is speech on, is screen curtain on? And so on and so forth. There's also a formatting text status cell which I haven't found to be very reliable, especially when, for example, in the middle of a line you have text attributes that change, which is what it's supposed to communicate. For example, if you have italicised content, underline or bold or whatever, those are a couple of the options. If you have that text, let's say, for example, a word bolded in the middle of a line, unless that bolded text is located at the start of the line, it might or might not interpret it correctly, because the status cell is always at the start of the braille display line and if you have one or more bolded in the middle, how can you possibly communicate that? So, it's one of those areas where maybe their design choice wasn't the best but that's what you're working with here.

Let me hit space with dot 4 again.

Synthesised Voice: Equations, use Nemeth code, on.

Scott Davert: Equations, use Nemeth code. You can turn that off and that should default everything back to UEB, if you have that turned on.

Synthesised Voice: Show on-screen keyboard, off.

Scott Davert: Show on-screen keyboard. That is going to be your on-screen keyboard which is sometimes handy in certain situations, for example, if you're trying to enter passwords, you might not be able to do so with the Perkins keyboard, so you would have to use the on-screen keyboard. So, you can come in here and enable that if you want or you can press space with dots 1 4 6, or SH, and that should automatically hide or unhide the on-screen keyboard, depending on what your choice is set to.

Space with dot 4 again.

Synthesised Voice: Turn pages when panning, on.

Scott Davert: Turn pages while panning is for when you're reading a book and it's been divided into pages and you don't want to have to hit the command to turn the book's pages every time you reach the bottom of one. It comes in really handy when you're doing leisure reading and you really don't care about the page number. It does, by the way, work well with Kindle. It also works with the Apple Books app, which has kind of an issue where it doesn't scroll automatically. Sometimes it'll show you the page number and you'll have to still do it manually, but for the most part turn pages while panning works pretty well. If you do need to turn a page in a book, to go forward you can hit space with the letter O and backward would be space with OW.

Moving along.

Synthesised Voice: Word wrap on.

Scott Davert: Word wrap is nothing to do with hip hop music. That would be kind of cool. I guess you could get some hip hop going with the braille music, I'm not really sure. But word wrap in this case allows you to see multiple items on your device. Now that does not apply to the Home screen. So, for example, if you were to go out of your Settings menu with word wrap turned off, you're not going to see the first four columns on your Home screen, or the first two, no matter the size of your braille display, but it does work when you're reading text or doing things like that, so that if you have word wrap turned off, in this case, you will have as many cells on the braille display active as possible.

The good news is that you can maximise your braille displays width. The bad news is, for some people anyway, when you have word wrap turned off, you'll have to pan forward eventually but you might pan forward and get only half of the word, because the first half of that word was on the previous width of the braille display.

Synthesised Voice: Braille alert messages, 1.5, button.

Scott Davert: Braille alert messages, a lot of people have them turned off right now. The reason for that, starting in iOS 15.2, is that for some reason when flash messages or alert messages come on, sometimes they cause the braille display and the iPhone to lock up. The only way sometimes to fix it is to do a hard reset on your phone. You can do that with volume up followed by volume down and then holding in the side button for about 15 seconds.

What are those alerts, you ask? Well, anytime VoiceOver delivers what it calls a VoiceOver announcement, which I know is a different term than what we have for braille display alert messages, but it's actually the same thing. Say, for example, you have a hint, like double tap to open. I have hints turned off because I'm using a braille display and they are 100% meaningless for a braille display user.

Geistworld [ph] is another example of an app that makes use of them. Any time a notification comes in, you'll get that message from this particular feature, but again, with iOS 15.2 and later, up to this point, we're on 15.3 now, it can cause your braille display to lock up. Sometimes the braille display doesn't lock up at all, the connection might but it's otherwise not affected, but the iOS device doesn't really respond to anything. So, again, doing that hard reset is the work-around, sort of. I wouldn't really call it a work-around but that's what has to be done.

Alright, moving along now, space with dot 4 again, and if I wanted to go back to the previous one, by the way, I think it's a good idea to remember that and that is space with dot 1. But we're going to do space with dot 4 now.

Synthesised Voice: Ignore chord duration, point 5, button.

Scott Davert: Ignore chord duration means that you are able to separate or set the amount of time that the braille display waits for a space bar to be picked up as part of what you're currently typing. For example, let's say you hit H with space, which will take you to the Home Screen, if you have it set kind of the wrong way, I guess, it could be interpreted as H space or "have" if you're writing in contracted braille, but obviously that's not what you want, but if you're having issues with that happening, you can come in here and adjust the ignore chord duration to set it up in such a way that you won't have issues.

Next option.

Synthesised Voice: Auto advance duration, five, button.

Scott Davert: Auto advance duration is what would be more commonly called auto scroll, and unfortunately it's not very easy for me to cover at this point, because you have to assign commands to make it function correctly, so I'm going to have to hold off on that until probably Masterclass three.

Keep going.

Synthesised Voice: Choose a braille display.

Scott Davert: Now we're at choose a braille display. So, underneath this section would be listed any braille displays within range or that have been previously connected to this particular iOS device and that would allow you to hopefully connect and I say hopefully because you saw what happened to me and that unfortunately is sometimes the case.

So, that's all for the braille menu. I can get out of here, depending on where I want to go next, I can hit space with B or I can hit space with dot 1 a lot of times to get to the top to activate the back button, or, depending on what I want to do, maybe I want to go to the top of this screen, you can go to the top of the screen with space and the letter L.

Synthesised Voice: VoiceOver, back button.

Scott Davert: There's VoiceOver back button. You can go to the bottom with space and dots 4 5 6.

Synthesised Voice: In progress.

Scott Davert: That's the bottom menu thing, in progress meaning it's searching for Bluetooth devices. I'll again hit space with L.

Synthesised Voice: VoiceOver, back button.

Scott Davert: That takes me to the top. But let's say I want to go to the Home screen. I can go to the Home screen with space and the letter H for Home.

Synthesised Voice: Dot Watch 2.

Scott Davert: Dot Watch 2 is the upper left icon on this Home screen. Just like in the menus that we were looking at, you can hit space with dot 4 to flick one item to the right.

Synthesised Voice: Photos.

Scott Davert: There's photos. Space with dot 1 takes you again to the previous item on the screen or equivalent to flicking left.

Synthesised Voice: Dot Watch 2.

Scott Davert: And you can also do space with dots 4 5 6 to take you to the lower right or the bottom in this particular case of the Home screen.

Synthesised Voice: Doc Music.

Scott Davert: Space with L.

Synthesised Voice: Dot Watch 2.

Scott Davert: That takes me to the top. If I would like to check the time, for example, I can hit space with the letter S to get into the Status bar.

Synthesised Voice: 2.23pm, status bar item.

Scott Davert: And that's the time as I am recording this. Now when I hit space with dot 4 or space with dot 1, I can move across the status bar.

Synthesised Voice: Cellular, no signal, my apps, 98,000, 159, 84% battery power, not charging.

Scott Davert: Now if I go back to the left with space and-- that's correct, dot 1, I heard everybody answering me out there, even though your mics are muted.

Synthesised Voice: My apps, 98,000, 150, cellular, no signal.

Scott Davert: So, you get the idea. To get out of the status bar, space with S again is usually the way I do it.

Synthesised Voice: Dot Watch 2.

Scott Davert: In this case, I'm returned to the upper left corner of the screen because that's where I was. You can also do space with the letter B which again doubles as Escape and Back and that will automatically take you to the upper left corner of the screen, but space with the letter S oftentimes will put you in the place where you were previously.

A couple of other commands before I wrap this session up and take questions.

Probably my favourite, one of my two or three favourite commands, will mute speech. Well, that's usually one of my favourites. Right now, it's probably not such a good idea since we're on an audio webinar type thing, but it is a toggle. So, if I hit space with the letter M for mute.

Synthesised Voice: Speech off.

Scott Davert: Speech is now off. I can press it again.

Synthesised Voice: Speech on.

Scott Davert: And speech is back on. Finally, before this lesson goes dark, let's make the screen go dark. Actually if I remember correctly, the screen curtain is currently off but I don't know, because I can't see it. But we can toggle the screen curtain with space and dots 1 2 3 4 5 6.

Synthesised Voice: Screen curtain off.

Scott Davert: Presumably now my screen is visible, if there was anybody in the room here to see it. I can press it again.

Synthesised Voice: Screen curtain on.

Scott Davert: And the screen curtain is turned back on.

So, that is the introductory material. There's a little more introductory material that we'll get into next time and at that point, we will also start looking at other navigation options and hopefully text editing, so that will be part two.

Thank you very much. I hope this has been helpful and will look for you again on the next Masterclass.

Dave Williams: You're with the Braillists Foundation. I'm Dave Williams. Thank you very much, Scott Davert, who is with us live and will be taking your questions here very shortly.

Lots to think about there, depending on what kind of braille display you have, obviously, determines how you go about setting it up in iOS and Scott has also introduced us to some useful commands for reviewing the screen, getting to the status bar, and toggling that all important privacy feature, the screen curtain.

So, Ben.

Ben Mustill-Rose: I didn't know there was a hot key to do that, so I've already learned something, which is great. Hands are coming in now, so we're going to come to Misty first.

Misty Kienzynski: When you talk about braille commands, you say space bar and another letter. Does that mean space bar and the other letter at the same time or in sequence?

Dave Williams: At the same time. So, it usually refers to the combination of braille keys that you would use on a device with a braille keyboard. That's right, Scott?

Scott Davert: Yes. So, space with something typically means hold down the space bar and press it. So, for example, you want to go to your Home screen, space with the letter H will do that. So, you would press the space bar in conjunction with the letter.

Dave Williams: Now, to be clear, Scott, that's only going to work on a braille keyboard. Would that work on something like, say, the Mantis, where we've got a QWERTY keyboard?

Scott Davert: No. And that's a good question, actually. So, on the Mantis, when you're using a Bluetooth keyboard, essentially that's what you're doing, is using a Bluetooth keyboard, because the keyboard is attached to the Mantis. So, in that case, what you would do is you would press the VoiceOver Modifier key, which would be either Ctrl and Option combined or the Caps Lock key and you can configure that under VoiceOver Settings, Modifier Keys. You would press and hold that VoiceOver Modifier and then hit the letter H to go to the Home screen. But, that said, not all Bluetooth keyboard commands are exactly the same as what you'll find on the braille display. So, for example, space with the letter S, with the Perkins keyboard, takes you to the Status bar. VoiceOver Modifier with S on a Bluetooth keyboard, whether that be the Mantis or just a keyboard, that mutes speech. So, there are differences and once I'm done with the handout, I will make sure to include not only a listing of the most common braille display commands but also one for Bluetooth keyboard commands, for that reason, because the Mantis is actually a display that's really growing a lot in popularity. So, I think it's important that we make note of that as well.

Ben Mustill-Rose: Thank you, Misty. We're going to come to Paul now and then Anna.

Paul Sullivan: I've just updated my iOS to the latest version, I think it's 15.3, the very latest one, and I'm having trouble using a Spanish dictionary online. It's called SpanishDict and I'm using a Focus 14 braille display and in any other application such as email or the notes function on the phone, it's working fine. I can input and I can read out what I've typed in and so on. But in this Spanish dictionary language tool, it's basically a very dynamic screen, so you type into a search box and then you get suggestions further down as to what words you might be looking for. I'm wondering if this is the problem, that I'm typing into a dynamic situation and I wondered if you've experienced this with anything else, on the web. So, I type into the search box and instead of producing the word I'm typing in, it will suddenly say, "Image not recognised," and then just present me with a blank edit field again.

There's a number of other issues as well.

Dave Williams: Right. It sounds like something is grabbing the focus there. Shall we let Scott come back on that?

Scott Davert: Sure. So, you updated iOS and not the app, so I'm guessing there might be some sort of an issue between the iOS update and the older version of the app and unfortunately I don't use that app, so I don't quite understand.

Paul Sullivan: I think the app is up to date and it does automatically update but I just wondered if you had come across a similar situation on, say, websites where stuff is moving around and changing around the basic text field.

Scott Davert: I've seen that on Safari, actually, where the focus will sort of jump away from what you're doing, very frustrating. It isn't new in 15.3 but for whatever reason you're experiencing it more in 15.3 Again, in that situation, it sounds like when iOS updated, it changed something in the way that iOS interacts with the app, so without having a look at that specific app, there's really no way for me to say what you can try. Really, once something gets shifted away, the focus, VoiceOver gets shifted away, the only thing you can do is go back to it and hope that it stays there.

Now, the one thing that I will say, and this is more a general comment, when you're typing, if nothing is happening, likely, for whatever reason, Quick Nav, which is a thing that we're not really going to talk too much about it, or I didn't think we were until right now, when you have Quick Nav turned off, which is what you want when you're typing, it works fine and you can usually type in most edit fields. However, sometimes Quick Nav does not turn on and off automatically as VoiceOver and Apple had specified it should. So, sometimes you can hit space with the letter Q for Quick Nav and see if that helps. If it says, for example, "Quick Nav on" and you want it off, again, I don't know exactly why it happens, but sometimes that Quick Nav option gets turned the opposite way that you want it to and VoiceOver doesn't even seem to realise it because you'll press space with Q and it will toggle to the other setting, whether that might be on or off, but then you hit it a second time to go back to the setting that you wanted and then you can type.

I don't have an answer as to why this happens. It also happens on the Lock screen sometimes, when you want to enter your pass code.

Dave Williams: It's going to be very difficult for us to address every individual situation, but obviously some general principles.

Somebody's suggesting on the chat, is it possible you need to double tap on the edit field to activate it?

We also have a question from the chat for you, Scott. Is there a quick way to view the page number in braille when using the Kindle app?

Scott Davert: I don't think there is a way.

Dave Williams: No, I think you just have to bring up the Navigation dialog and go and look there. Each book will place the page number in a different place. So, I don't think there is a quick answer for that one.

Shall we take some more hands, Ben?

Ben Mustill-Rose: Yes. We're going to come to Anna, and then Jess.

Anna Louise Smith: I have a BrailleSense 6 which came out in the middle of last year and how do I pair that? Do I have to do the same? Do I have to go into the Accessibility and go into that way to pair it to Bluetooth?

Scott Davert: Now, I haven't done this on the BrailleSense 6 yet, but I know it's very similar. What you want to do is go to Terminal for Screen Reader, and I believe that is in the main menu. You can just press T, if I'm not mistaken, unless they've changed it.

Dave Williams: It used to be in Utilities on the HIMS devices. Maybe they moved it out into the top level menu, but it's called Terminal for Screen Reader.

Scott Davert: Yes. Then what you'll have to do, it's a little bit more complicated than some things, on your phone, you'll go to Settings, Accessibility, VoiceOver braille, once you're in Terminal for Screen Reader, you have to do that first. Then what's going to happen is it will probably prompt you for a pin code. If it does prompt you for a pin code, you'll have to enter that code first in computer braille on the BrailleSense 6 and then you'll have to enter that same code on your iOS device and then double tap "pair".

Anna Louise-Smith: I think I'll have to get someone to help me with that. It sounds very complicated.

Dave Williams: I think Stuart Lawler at Sight and Sound, he might be the person to help you with that.

Anna Louise Smith: I know Stuart. I'll get him to help me with it. Thanks for trying to help, Scott, I really appreciate it.

Ben Mustill-Rose: We're going to come to Jess next and then Ellie.

Jessica Beal: That was really interesting. I feel I've learned a lot. I wanted to ask, I've got a VarioUltra braille display and I have been pairing it up with iPhone, which is great, but I never have used any of those keys to go back and forward, I always just use my hand and do things, but I'm going to try all these new things that I feel I've learned tonight, which is great, but you were saying about the Home screen and how to navigate around that. If you want to go onto your next page for the apps that are on there, how would you do that using the braille display, rather than just swiping with three fingers?

Scott Davert: Sure. Which app are you using?

Dave Williams: It's how to change pages, Scott. I think it's space with O, the command you want.

Scott Davert: Yes, space with O will take you to the next page and then space with OW or dots 2 4 6, that will take you to the previous page. Is it 100% reliable? No. But that's how you would achieve that.

Ben Mustill-Rose: We're going to come to Ellie next and then Carol.

Ellie Clark: I was just wondering how to navigate the page numbers and find out what number you're on in a book on a braille display?

Scott Davert: On which application? I'm sorry, they're all different.

Ellie Clark: Kindle.

Dave Williams: I think we already had that one from Rachel in the chat and there isn't a quick way to do that, is there, Scott?

Scott Davert: There is not, unfortunately. It's one of those things where they made it and in my opinion, usually it would be a good thing, you have your text and you just read along with no menu in your way, nothing like that. But this is one of those things that you can't really do unless you go back into the menu. Now, you can use space with O to go forward page by page, but that's not going to do what you're looking for. You have to go back out of the text and then go into the menu and do it that way. So, not very efficient, I understand, but that's iOS. Sometimes it's great, sometimes it takes a long time to do something that you would think would be really simple.

Ben Mustill-Rose: Sorry that wasn't quite what you were looking for, Ellie, but do pop into the Braille Bar and that's open to anyone else as well if we don't manage to get your questions quite answered this time round. We're going to come to Carol and then we'll hand over to Dave to wrap things up.

I'm trying to unmute you, Carol.

Dave Williams: While we're waiting for that, I have a question for Scott. Just going back to Paul's question, he's got this Spanish dictionary and he's trying to use it with Safari and his braille display and it keeps grabbing the focus away. When we encounter issues like that, sometimes it's a little bit ambiguous about where to direct feedback. How would you advocate for resolution to those kinds of situations, Scott, where you've got an app that isn't playing nicely with braille and maybe there's been a regression there and something that used to work has stopped? Do you badger Apple? Do you go to the app develop?

Scott Davert: I always look to contact the app developer and the reason I say that is because if you're having that issue on that specific app, then that would be the app developer. Now, if, for example, you upgrade to, say, iOS 15.3 from 15.2 and then you're encountering an issue, I would still contact the developer or whoever runs the website and explain to them the situation, but I would also contact Apple, because obviously if the only thing you've changed is your iOS upgrade, the upgrade of iOS is part of the issue.

Now, what you can do, let's say, for example, you are able to get into a text field that you want to type in but it's not accepting braille input, and we're going to look into this on part two of these Masterclasses, but what you can do and it is a pain to do, but you can write up what you want to insert, say, for example, in the Notes app, copy it to your clipboard, go into Safari, go into the text field and paste it and then hit Enter and sometimes that works and that's a challenge really in a lot of areas where you have to enter passwords. The braille input just doesn't take, for whatever reason, so if you type your password in the Notes app and then copy and paste it into the password field, a lot of the time that will work and sometimes that will work in these types of situations also.

Ben Mustill-Rose: Good to know. We're going to really quickly come to Carol now.

Carol Adams: There are some issues at the moment with Apple, with iOS and braille, isn't there? Are they going to be fixed, do you know? What I'm finding is, if I'm writing in an edit box, if I'm putting a password in for something, it's not working and so I end up having to use something else to do it.

Dave Williams: I think Scott actually just covered that and I think he's going to cover this next time also, but, Scott, do you want to just repeat?

Scott Davert: Sure. Well, number one, I hope they fix it. Like you, I'm a user. I've been teaching these things for years but I don't have any official affiliation with Apple and I unfortunately have no real way of doing a whole lot more than you as another user reporting things. Is it going to get fixed? All we can do is keep reporting these things to Apple and hope they listen. As of right now, no, there aren't really any fixes unfortunately. I wish I could say otherwise.

As far as entering passwords, again, I'll talk about this next time, but what you can do and you're 100% correct, by the way, that when you're entering a password, a lot of the time, whether it's on Safari or in an app, it does not accept the input, even though it'll show it has on your braille display, and the only real way I've found to work around that is to go into another app, type your password, copy it to your clipboard and then paste it into the password field.

The other thing you can do is if you unhide the on-screen keyboard and you can do that with space and dots 1 4 6, once you unhide that on-screen keyboard, if you want to use that method, then you can pick up your iOS device and enter the password that way. So, those are the two work-arounds that I know of.

Dave Williams: That's a great keystroke to know, to hide and unhide the on-screen keyboard. Maybe we should also include that in the next session as well.

Thank you so much for your expertise and your energy this evening. It's been very, very much appreciated. I know that sometimes it can be a bit of a mystery on how braille and iOS get along. The rewards are definitely worth it, in terms of the amount of content we can get in braille, but there are definitely plenty of hurdles to overcome to make those things play nicely together.

So, thanks again to Scott and to Ben for your help fielding the questions and for all of you for coming along and for your great questions.

I've been Dave Williams and this is the Braillists Foundation, until next time, bye for now.

Matthew Horspool: We hope you've enjoyed this episode of Braillecast Extra. You can find more braille-related content by subscribing to Braillecast in your podcast client of choice, or listening to Braillecast: Connecting The Dots For Braillists Everywhere, on your smart speaker.

For the latest information about future Braillists events and how to join live, subscribe to our weekly email newsletter at braillists.org/newsletter/signup.

You can also visit our Events page at braillists.org/events.

If you have comments on this recording or suggestions of topics or guests for future events, we'd love to hear from you. Please email help@braillists.org. You can also find the Braillists on Twitter, @braillists, or on Facebook, facebook.com/braillistsfoundation.

Finally, if you like what you've heard, spread the word. We welcome new listeners and live participants alike. So if you know other people who are interested in braille, please tell them where to find us.

In the meantime, on behalf of everyone at the Braillists, thanks for listening and bye for now.

The costs of producing this episode were defrayed by a grant from the Activate fund of the Winston Churchill Memorial Trust. For more information, visit wcmt.org.uk.