

Using a Braille Display with T-Mobile IP Relay

Is my braille display supported with the T-Mobile IP Relay app?

The T-Mobile IP Relay app supports most commonly used braille displays. Any iOS device that runs VoiceOver can support a large variety of Bluetooth braille displays. Android devices that run Talkback and Brailleback can also support a large variety of Bluetooth braille displays.

Go to, <https://support.apple.com/en-us/HT202514> with Apple's official list of supported displays to verify your model is supported.

Go to, <https://support.google.com/accessibility/android/answer/3535226?hl=en> with Google's official list of supported displays to verify your model is supported.

Common ones include: Humanware's Brailiant, HIMS' Braille Sense line, and many stand-alone displays from Alva, Baum, Freedom Scientific, and other companies.

How do I pair my braille display with an iOS or Android device?

iOS device instructions:

1. Put your display in "terminal" or "discoverable" mode.
2. On the iOS device, go to Settings, general, accessibility, VoiceOver, Braille. If the iOS device Bluetooth is not on, you will be prompted to turn it on at this point; do so before continuing.
3. After a few seconds, you will see a list of available displays (assuming your display is in the correct mode). Simply choose your display from the list by double tapping it.
4. In some cases, you will then be prompted to enter a passcode on the iOS device. This code will differ depending on which display you are using, so check with the documentation or display manufacturer to find the correct code. The manufacturer should also let you know if no pin is required. You will only have a few seconds to enter the code, so be ready with it and be sure you are comfortable typing with the iOS device's onscreen number pad. Once you have entered the code, double tap the "pair" button, found in the upper right of the screen, just below the status bar.

If all went well, there will be a delay of a few seconds and then you will see braille appearing on your display. You

can now use the display to read what VoiceOver says and, assuming you have a keyboard on the display, enter text and commands into the iOS device.

Android device instructions:

Download and install the BrailleBack app from the Google Play Store -

https://play.google.com/store/apps/details?id=com.googlecode.eyesfree.brailleback&hl=en_US

Turn on BrailleBack and pair your braille display.

Note: Before you turn on Brailleback, make sure that TalkBack is also on.

To turn on BrailleBack on your Android device, follow these steps:

1. Open your device's Settings app Settings app.
2. Open Accessibility, then BrailleBack.
3. Turn on BrailleBack.
4. Go back to Settings. Under Wireless & networks, select Bluetooth.
5. Turn on Bluetooth.
6. Select the name of your braille display.

- a. If your braille display isn't listed, make sure the display is in pairing mode, then select Search for devices on your Android device.
- b. For pairing instructions, refer to the documentation for your braille device.

Troubleshooting

If you take too long to enter the passcode or if you fail to pair your display a few times in a row, you may run into strange problems. Below are some common difficulties and how you can try to overcome them.

- If you try to enter the passcode three times and are unsuccessful, you will find odd things happening; your device may not find the display, it may refuse to prompt for the passcode, and so on. To get around this, go back to the main Settings screen and choose Bluetooth. Find your display in the list of devices and double tap it. Now find and double tap the "forget device" button. You are now free to try three more times to pair the display.
- If that does not work and error messages still appear when you try to pair your display, try rebooting or turning the iOS or Android device off and back on. Also try resetting your braille display and/or clearing out its saved Bluetooth table (refer to the device's documentation for help).

- If both do not solve the problem, try resetting network settings. This reset is located under settings>General>Reset. You will have to reenter any Wi-Fi network information you have stored, but it can also sometimes make things work again. The reason that this can make a difference is because both the Bluetooth and Wi-Fi radios on your iOS or Android device are on the same chip.

My braille display and iOS or Android device have stopped working together, what can I do?

As noted above, try turning your iOS or Android device off and back on (this is not the same as locking and unlocking it). Also try resetting your braille display and/or clearing out its saved Bluetooth table (refer to the device's documentation for help).

If both do not solve the problem, try resetting network settings. This reset is located under Settings>General>Reset. You will have to reenter any Wi-Fi network information you have stored, but it can also sometimes make things work again. The reason that this can make a difference is because both the Bluetooth and Wi-Fi radios on your device are on the same chip.

If the above fail to solve the issue, it is recommended that someone sighted or hearing to support you in doing the pairing process over again after having your device forget your braille display.

Please note that though you can pair a braille display as noted above, VoiceOver for iOS must be turned on for the braille display to function. Brailleback and Talkback for Android must be turned on for the braille display to function.

What codes and grades of Braille are supported by iOS or Android?

iOS and Android support contracted braille (U.S., UK, and UEB) for input and output, and Nemeth when displaying equations (see the braille settings to configure these and other options). It also supports eight-dot braille, and the table used for that is based on your language selection. In other words, the language your device is speaking is the same language in which eight dot braille will be handled. In iOS6 or below, you still have language-specific eight-dot braille, but you cannot choose your English braille code, and Nemeth display is not present.

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