



Cleaning the Focus Braille Display

Overview

It is not necessary to clean your Focus braille display on a set schedule. Rather, the frequency of cleaning the display will depend upon factors such as the cleanliness of the hands, the oiliness and/or sweatiness of the hands and the amount of moisture, dust, and other particulates in your current environment.

Based on these considerations, Vispero recommends the following:

- Avoid using your braille display after eating or handling items which have soiled your hands or left powder or other debris on your fingers without first washing and thoroughly drying your hands.
- Avoid applying hand lotions such as skin moisturizers or hand sanitizers/cleansers prior to using your braille display. These products can cause dirt and other contaminants to stick to your fingers and transferred to your braille display. Also, lotions and creams can themselves be transferred to the braille dots and surface of your display, thereby soiling it directly or attracting other contaminants.
- If sticking braille dots should occur, please do not insert small, pointed objects (i.e., pins, pen tips, etc.) into the braille dot holes to free the sticking braille dots. This is likely to cause damage to your braille display that is not covered under your Vispero product warranty. Following the cleaning procedure outlined below is your best option to resolving sticking braille dot issues.

Cleaning Your Focus Braille Display

Items needed to clean your Focus Braille Display:

- Two clean, lint-free cloths; avoid using paper towels or tissue type paper which may leave paper particles on or in your braille display.
- High purity isopropyl alcohol. Avoid using alcohols or other cleaners that include scents or other ingredients which may result in further soiling or potentially damaging your braille display. (Note: if high purity isopropyl alcohol is not available, high-purity distilled water can be used instead. Using water instead may require more cleaning effort to remove sticking contaminants.)
- A new, clean, finely bristled brush that will be used for removing contaminants from the braille deck & dots (e.g., a new soft-bristled toothbrush or other new soft bristled brush that is used only for cleaning the Braille Display)



First, clean your braille display with the fine bristled brush by following the steps below:

1. If a USB cable is connected to the display's USB port, disconnect it for the duration of the cleaning process.
2. If your Focus braille display is turned on, power the unit off by pressing and holding the power button in for 2 seconds (until the display powers off).
3. Pick up and turn your braille display upside down and gently shake the display. This will help remove loose contaminants on the surface of the braille deck or in the braille dot holes.
4. Press and hold the power button while pressing the two rightmost cursor router keys. Hold both the power button and the two rightmost cursor router keys until the display powers on with all braille dots in all cells raised.
5. Carefully turn the display upside down to allow any debris loosened by the movement of the braille dots to fall out of the display.
6. With the braille display upside down, using the fine bristled brush, lightly brush across the entire braille deck multiple times ensuring all dots have been lightly brushed. (If brushing the braille display upside down is too difficult, you can instead turn the braille display tilted on its side with the braille dots slightly facing downward and brush it. Note, it is important to not have the braille dots facing up when brushing as this increases the risk of the brush pushing contaminants into the braille dot holes which may cause the braille dots to stick.)
7. Keeping the display upside down or on its side tilted downward, press the right Nav Mode button to cause all braille dots to begin cycling down then up.
8. While the braille dots are moving up and down, use the fine bristled brush to lightly brush across the entire braille deck multiple times ensuring all braille dots have been lightly brushed.
9. Press the right Nav Mode button again to stop the cycling of the braille dots.
10. Place the braille display right-side up on a table or other flat, stable surface.
11. Press and hold the power button in for two seconds, until the display powers off.

Now, clean your display with the two lint-free cloths by doing the following:

1. Lightly moisten a lint-free, soft cloth with the high purity isopropyl alcohol or high purity distilled water. **IMPORTANT! Do not soak the cloth. It should not be saturated so that cleaning liquid can be wrung from the cloth. This will help reduce risk of liquid entering the braille display which could damage internal components.**
2. Place the lightly moistened cloth aside in an easily accessible location.
3. Confirm the braille display power is turned off and verify the unit is unplugged from the charger or PC USB port. **WARNING: any liquids entering the braille display may potentially damage the product. So, it is important during cleaning with the alcohol or water moistened cloth to have the display powered off during the cleaning procedure. This reduces risk of damage while cleaning with the lightly moistened cleaning cloth.**
4. Turn the display upside down or on its side tilted with the braille dots pointing downward (like in steps 5 & 6 of the previous procedure)
5. Keeping the display upside down or on its side tilting downward, gently wipe the raised braille dots with the alcohol or water dampened cloth. Use as much of the cloth's surface area as necessary to be sure that all dots are wiped with clean cloth.



6. Then, keeping the display upside down or on its side with the braille dots pointing downward, take the clean, dry cloth and wipe the braille dot area thoroughly; this removes any residual contaminants and cleaning liquids left behind by step 5.
7. Inspect the braille deck surface for any remaining moisture that exists. Use the clean, dry cloth to remove as needed.
8. After confirming all residual moisture has been removed, place the braille display right-side up.
9. Turn on the braille display power
10. Press the right Nav Mode button to cause all braille dots to begin cycling down then up.
11. After a few up & down cycles of the braille dots, check to see if the braille dots and braille deck surface feel clean; the dots and display surface should gain a “squeaky” feel when they are clean and free from hand oils and other contaminants.
12. Any sticking braille dots may require special attention to allow them to move up and down freely. You may need to repeat the entire cleaning process several times to be sure the braille dots and surface of the display are clean and any sticking braille dots are free to move.
 - i. When repeating the cleaning procedure, we recommend cleaning the fine bristled brush prior to brushing the braille display.
 - ii. Please use clean cloths when repeating the cleaning procedure.
13. You may also want to clean the braille keys, other controls, and other surfaces of the braille display to be sure that the rest of the display is also free from hand oils and other contaminants.
14. When you are satisfied that the display is thoroughly cleaned, press and hold the power button in for two seconds, until the display powers off.