Braille Training Cell - 6MM

3D Printy

VIEW IN BROWSER

updated 2. 6. 2024 | published 2. 6. 2024

Summary

Teaching aid for learning to read and write braille with large 6mm diameter buttons.

Learning > Other 3D Objects for Learning

Tags: teaching tpu teachingtool braille 3dprinty braillecell

Teaching aid for learning to read and write braille with large 6mm diameter dots.

https://youtu.be/Z9aghYXRcNk

Customization
Case Size

- Single cell
- 8-cell

Case Style

- Hard Case with embedded TPU inserts
- Fully TPU Case

Button Options

- Flat
- Round

Printing

- All parts can be printed without supports
- Cases are printed upside down (walls facing up) so there is no bridging
- 92A durometer or softer TPU is recommended for all flexible parts
- Print buttons in PLA or other rigid material
- If printing the hard case on a multi-material printer, turn on "Interface Shells" so the TPU gasket has a solid base to print on
- If printing the hard case on a single-material printer, pause the print just before the layer where the case begins to bridge. Insert the TPU gasket so that the top is entirely flush
- 2 perimeter walls is sufficient for all flexible parts, but additional perimeters may provide better results if the buttons feel too loose

Assembly

- Press fit buttons into the case.
- That's it!

Filament

You can get drastically different results depending on what filaments you use for the flexible parts of this design. This video by Filament Stories includes some recommended options.

https://www.youtube.com/shorts/OflMXw4e_Sk

https://youtu.be/8oy3ABtAt2E

Can I sell copies of this?

Yes! This project was shared under the Creative Commons - Public Domain license.

This license grants you permission to download, distribute, alter, print, and sell copies of this design.
This license applies only to the model files (STL, 3MF, STEP, F3D) included in this project. It does not apply to photos, videos, my logo, or other supplemental graphics attached to or displayed with this project.

Model files
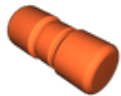
Demo
2 files

demo-assembled.3mf
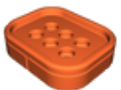
demo-assembled.stl

Buttons
2 files

button-flat.stl

button-round.stl

TPU Case
2 files

tpu-case-single-cell.stl

tpu-case-8-cell.stl

Hard Case
3 files

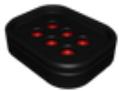**hard-case-single-cell.stl**

hard-case-8-cell.stl

tpu-insert.stl

Print-in-Place Hard Case
2 files

print-in-place-hard-case-single-cell.3mf

print-in-place-hard-case-8-cell.3mf

Templates
1 file

template-all-files.step

License Ⓒ

Public Domain

✔ | Sharing without ATTRIBUTION
✔ | Remix Culture allowed
✔ | Commercial Use
✔ | Free Cultural Works
✔ | Meets Open Definition