



Mouse replacement for people with brain injury or disability



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Summary

I have designed a joystick to replace a mouse for (disabled) people who experience difficulty using a mouse.

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Tags: [brain](#) [mouse](#) [joystick](#) [disability](#) [disabilities](#)
[telangiectasia](#) [ataxia](#) [nervous](#)

Mouse replacement for people with a nervous or brain dysfunction which prevents them from using a regular computer mouse. In this case a child was not able to use a regular mouse, because she was not able to click the mouse without having a tremor. The joystick is pretty easy to make, or to have made by a person with minor electronics knowledge. Soldering is also required.

The dust cap should be printed in a very flexible material (TPU) or may be omitted.

Additional parts needed:

- Arduino pro micro without headers
- MPU-6050 Accelerometer and Gyroscope 3-Axis Module 3.3V-5V

- 3 non latching buttons type AB6Y-M-(colour)
- several different colours of thin insulated stranded wire
- a micro USB data cable
- a tap M4
- a tap M6
- a sockethead screw M6x30
- two sockethead screws M5x40
- two nuts M5
- two setscrews M4 with a flat point and internal hexagon
- one strong printbed spring about 30mm long OD 8mm

Instructible for the assembly and code:

<https://www.instructables.com/Mouse-for-People-With-Brain-or-Nervous-Disability/>

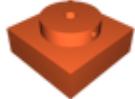
I want to mention 'Kikihobbyrepair'. I have worked further from his idea 'space rat' which you can find on this link: <https://youtu.be/68EapQbDBOc>

I hope i can help some people with this design.

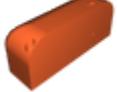
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Model files

base.stl



housing-2.stl



housing.stl

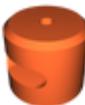


handle.stl





dust-cap.stl



imu-holder.stl

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