

Slithering Snake Switch Adaptation

Device Summary

Version: v1.0 | Date: 25/06/2021

Overview:

The device is a remote controlled snake that is adapted to be used with switches. The device is a toy that can be used for recreation, therapy, and education, and can be used by anyone that is able to use switches. The device is pictured below.



Usage:

The snake can be controlled with three switches that have a 3.5mm cable. The switches allow the snake to be moved in three directions, “forward,” “left,” and “right.” The control of the snake requires different types of pushes. The “forward” control is a single push whereas the “right” and “left” controls require the user to hold down the switch for the duration of the movement.

Cost:

Cost estimate does not include the price of tools

Item	Cost (CAD, tax and shipping not included)
Toy	\$29.99
Mechanical components (including 3D printed parts)	\$0.37
Electrical components	\$6.33
Total:	\$36.69

© 2021 by Neil Squire. This work is licensed under the CC BY SA 4.0 License:

<http://creativecommons.org/licenses/by-sa/4.0>

Files available at <https://www.makersmakingchange.com/project/slithering-snake/>

Build Instructions:

SKILLS REQUIRED:

- Soldering
- 3D printing
- Drilling

TIME REQUIRED:

- 1 hour assembly time

TOOLS:

- Wire strippers
- Flush cutters
- Screw driver
- Drill
- Drill bit (5/32")
- Soldering Iron
- Solder
- Permanent marker
- Ruler
- Needle Nosed Pliers (optional but helpful)
- Safety glasses

COMPONENTS:

- Mono jack (x3)
- Wire
- #4 Screws, 3/8" length (x2)
- Heat shrink wire wrap

3D PRINTED COMPONENTS:

- Mono jack box
- Mono jack box lid

Attribution:

Tinkered Toy Box video provided idea for toy adaption, and wiring concept:

https://www.youtube.com/watch?v=ZQzStC5GnnY&list=PLqXc2oqdc5jDcFIYttTzFnOQKCHOn_w0y&index=1&t=750s&ab_channel=AnnArborDistrictLibraryAnnArborDistrictLibrary

© 2021 by Neil Squire. This work is licensed under the CC BY SA 4.0 License:

<http://creativecommons.org/licenses/by-sa/4.0>

Files available at <https://www.makersmakingchange.com/project/slithering-snake/>