Plate Switch

(Low Vision Switch Access Kit – EC COE)

Description:

The Plate Switch is a large, rectangular, wired, mechanical switch that is inclined about 30 degrees for ease in viewing the switch's touch surface. It has a 3"L x 5" W x 1¾ "H activation surface and weighs ¾ lbs. Unlike many other switches, this switch does not require a battery to operate.

The Plate Switch can be used as an external input for speech-generating devices (SGDs), computers and mobile devices, switch-adapted toys, and a variety of other electronic and battery-operated devices. However, depending on the device and its function of the device, an additional switch interface may be needed between the switch and the device. The Plate Switch can be plugged directly into most switch-adapted toys and other devices that have a standard, mono 3.5mm switch jack and have a simple on/off function.



Image:



Purchase Information

Plate Switch Video - while the video focuses on the Floppy Bunny Switch Adapted toy, the switch used to activate the bunny is the Plate Switch

Setting Up a Wired Switch Demo Video

Quick Start Guide

Who Might Benefit?

Those who…

- Can adequately press to activate a mechanical switch.
- Need a larger activation surface than a standard-size switch. This may include children with visual impairments or blindness and children with motor challenges.
- Have motor challenges and need an alternate form of access to engage in activities associated with computers, mobile devices, speech-generating devices, adapted toys, and other electronic and battery-operated devices (small kitchen appliances, fans, lights, etc.).

- Have motor challenges and need a way to access and engage in typical childhood activities that may be simulated through electronic means (playing a board game, reading a picture book, creating art, listening to music, playing with cars, cutting with scissors, etc.)

Why Use?

Provides an opportunity to…

- Interact with toys and other switch-adapted electronic devices.
- Access to communication devices.
- Engage in switch-accessible computer/tablet activities.

Instructions for Use:	Adaptation Ideas:
Environmental Considerations • The Plate Switch is extremely durable and can be used in most environments. Because they have electronic parts and mechanical features, it is best to avoid environments where the switch would be submerged in water or be placed directly in dirt or sand. **Positioning** • The child can be in any position where they can see the device, and they can access the switch and the device attached to the switch can work safely. Most typically the child would be seated in a chair or on the floor. **Alternate Positioning** • Alternate positioning of side-lying, Tummy Time position (prone), lying on the back (supine), kneeling, etc. may also be possible however as mentioned above the device attached to the switch needs to be in a position to be able to work safely, and the child needs to be able to see the device and access the switches. • If alternate positioning of the switch is needed, the OCALI lending library offers a variety of articulating switch mounting systems that can be positioned in a variety of ways. The switch is then mounted to the arm, and the arm can be mounted to a table or a child's seating system.	**Optional Additional Materials/Supplies** • Dycem • Velcro **Stabilize It** • Non-skid matting or Velcro could be used under the switch to keep it from moving on a surface. • The Plate Switch can also be mounted onto a switch mounting arm (Ablenet Universal Switch Mounting Kit) for stabilization in various positions other than on a flat surface. Often these are used if a child has limited ability to reach with their arms and/or another body part is being used to activate the switch, such as the knee, foot, etc. The optional switch mounting arms can be borrowed from the OCALI Lending Library.  **Add Sensory Cues** • Because the switch is mechanical, there is a clicking sound on activation. Using fabric for tactile sensory cues or attaching visual cues, such as pictures, to the switch touch surface may provide additional feedback on the purpose and location of the switch. Printable picture symbol overlays can be created for the Plate switch with the free AbleNet Symbol Overlay Maker app, which can be downloaded from the Apple App Store. The app requires an iPad with OS 13 or newer. It may also be

Basic Play/Use

- This switch does not require batteries.
- Plug the switch into any switch-adapted device with a standard 3.5-mm / 1/8-in TS (mono) jack.
- Once the activation area of the switch is pressed, the attached device will activate.
- The device attached to the switch will stop once the child releases the pressure on the switch.
- Switches are intended to be an interface between the child and an activity. The focus and emphasis should never be on the switch, but rather on directing the child's attention to the activity the switch activates. (e.g., move the car, play the music, start the scissors, etc.). In the initial phase of introducing a switch to a child rather than tell the child to "press the switch", instead say "press the switch to play the music" As the child begins to understand and learn the cause and effect of pressing the switch to play the music, the directions should become simply "play the music". The child will understand that pressing the switch is their way to play the music, much like other children who do not use a switch understand that pushing a button on an MP3 player will play the music.
- Toys and devices with a single mono 3.5mm switch jack port and a simple on-off function are the most simplistic ways to use a switch. The Big Red Switch can be plugged directly into the switch port of the device with the switch jack.

Extended Play/Use

- Some activities require that the child maintain pressure on the switch for the activity to continue. If the child can't maintain continuous pressure on the switch, a switch latch timer could be used to set up the switch so the child needs only to depress the possible to label the switch with braille for those children who are braille users and/or attach various textures to the switch face for added tactile support.

Communication Support

- Communication boards could be developed with keywords needed to engage in the specific activity the device is being used to support (cooking, art, math, literacy, gardening, etc.). Additionally, words such as more, go, stop, start, and help should be included to support the actual functions of the device. If the communication device is being used by students with low vision or blindness, it may be necessary to consider the size of items on the communication board, auditory cueing of vocabulary, and possibly the use of braille labels.

Alternative Uses

- Other switches included in the Low Vision Switch Access kit could be trialed if the Plate Switch is not successfully used by the child. The OCALI lending library also has several other kits with multiple types of switches that can be trialed.

DIY Alternatives

- It may be possible to use a battery interrupter to quickly switch adapt a standard battery-operated toy that does not have a switch port but has a specific on/off function. This video describes how to adapt a toy using a battery interrupter.

(NOTE: the battery interrupter needed is specific to the size of the battery in the device).



switch once to start the activity. The activity would continue until the switch was depressed again by the child. The OCALI lending library has switch latch timers that can be loaned to make this simple adaptation. They can be found in the Switch Connection Kit.

- If you wish to run an electrical appliance with a switch, such as a fan, hairdryer, or blender, an electrical switch interface will be needed between the device and a switch such as the Powerlink. This device can also be requested from the OCALI Lending Library
- Some devices need switch interfaces to send the correct switch functions to the device for switch scanning. Devices such as computers and mobile devices typically require a USB connection. Switch interfaces can also be found in the OCALI lending library for loan through the Switch Connection Kit that allows switches to be used with these types of devices and switch-accessible software.

Play/Use with Others

- This switch is a single switch intended to be used by one person. It could be used in a turn-taking activity with an appropriate accessory (toy or device) attached to the switch. However, multiple switches can allow multiple players to do various parts of an activity based on the software used for the activity or if the switch-adapted device has multiple switch ports and functions.

Additional Considerations:

- The Plate Switch is neither waterproof nor completely water resistant.
- Do not immerse the Plate Switch in water or any other liquid. Make sure that no liquids are spilled on the switch.

Additional Resources:

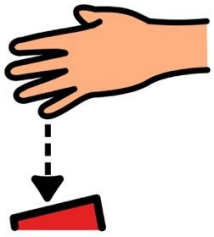
- To learn more about how switches can provide access for children with significant motor challenges go to the OCALI Assistive Technology Internet Modules: Switch Access - WATI - Part I and Switch Access - WATI - Part II which will describe in more detail how to assess the need for, setup, and use switches for a variety of access needs.
- Linda Burkehart's Stepping Stones to Switch Use Chart - A guide to teaching step-by-step switch use. The guide also contains activity examples for each step.

Ohio Early Learning Standards

- SC: Science Inquiry and Application: Develops ability to reason about cause and effect. (1.b.).
- Additional Ohio Early Learning Standards would be dependent on the specific activities accessed and supported by the switch and accompanying toy/device.

Words to Encourage Play/Use

- Words to encourage play would be primarily dependent on the activity the switch is activating.

Press	Release	Hold
		

Adapted from: Haugen's Modes for Adapting Toys based on materials from the "Let's Play" Project at the University of Buffalo

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