LEARNING RESOURCES CENTER

Assistive Technology: Motor

1. **AlphaGrip Gaming Keyboard Controller**: Type up to 70 words per minute while standing, sitting, reclining, walking, or lying in bed. The iGrip provides a portable, comfortable way to write emails, take notes, compose memos, and create text messages 2-5 times faster than you can with a cell phone keypad or thumb keyboard and much more comfortably than a keyboard and mouse. See for yourself as the iGrip is demoed by a teen in a recliner, on a laptop outdoors, gaming on a flat screen TV, and literally on the run.

   Used as a gaming keyboard, the AlphaGrip's ten-finger control greatly enhances your ability to generate any action: firing a weapon, moving quickly, crouching, jumping, punching, swinging, whatever, by maximizing the number of actions you can take with a single press with a single finger of a single key. If you are currently using your two thumbs and two index fingers to play games, adding the use of six fingers will more than double your capabilities. Of course, being able to quickly create text messages and, in fact, having full control of your computer with a game controller, is pretty wild too. In its current form, the iGrip Ergonomic Keyboard does not function as a game controller for popular game consoles such as the Wii, XBox or Playstation, though we hope to produce an iGrip game controller in the future.

   **How does it work?**  
   Typing: [https://www.youtube.com/watch?v=m2Vrowtc3rc](https://www.youtube.com/watch?v=m2Vrowtc3rc)

   Gaming: [https://www.youtube.com/watch?v=LhwFOBwmJuM](https://www.youtube.com/watch?v=LhwFOBwmJuM)

2. **Big Keys Keyboard**: This device is for adults and children with advanced keyboard needs, who require large keys in order to locate and operate a keyboard. The QWERTY key layout accommodates those who are accustomed to the key order on a standard QWERTY keyboard. This device is great for those with visual impairments!

   - USB connector

   **How does it work?** [https://www.youtube.com/watch?v=XsXd2e-OnXc](https://www.youtube.com/watch?v=XsXd2e-OnXc)
Using the keyboard with an iPad:
https://www.youtube.com/watch?v=jiABvmHf7qA

3. BIGtrack Large Trackball by infogrip: BIGtrack is ideal for those who don't have the fine motor skills required by a mouse. The BIGtrack has a 3-inch trackball, which makes it the largest trackball available. The large ball requires less fine motor control than a standard trackball and it is ruggedly built. It has a left and a right mouse click button located behind the trackball to avoid unwanted mouse clicks. The BIGtrack trackball also allows for 2nd Mouse Connection both the BIGtrack and a second mouse can be connected allowing simultaneous participation. The bright large 3" trackball helps to make mouse movements easy and accurate. While the oversized buttons make mouse clicks simple for those with poor motor control. For even more access the BIGtrack is available in a switch-adapted version. The switch adapted BIGtrack comes with two standard 1/8" plugs for two switches. Its left and right mouse clicks have been adapted so that you can use a switch for activation. This large trackball is also perfect for kids of all ages, especially children in preschool. The large trackball is easy on little hands and is simple to use.

How does it work?
https://www.youtube.com/watch?v=XT6n5yGUcbA

A story of a man with ALS and how he uses the BIGtrack trackball:
https://www.youtube.com/watch?v=11efRFiDvQA

4. Boogie Board Sync 9.7 by iMPROV electronics: This device allows you to digitally create page after page of notes and drawings without sacrificing the writing experience. The Boogie Board Sync 9.7 saves your images and wirelessly transfers to your phone, tablet or computer via Bluetooth.

How does it work?
https://www.youtube.com/watch?v=OoGMBZ3ODXQ

5. Creature Chorus CD Rom by Laureate: This program is designed for children with severe disabilities, but has activities and features that are appropriate for those functioning at six months of age and up. Creature Chorus is the first step in language intervention and teaching computer
access. It features nine activities that progress from cause and effect training to visual tracking and discrete pointing. The game-like activities are enlivened by a bevy of fun animated characters.

Great for developing mouse, touch screen, and single switch use plus turn-taking skills. Grades pre-K and up.

**How does it work?**
[https://www.youtube.com/watch?v=c48pinD4Cso](https://www.youtube.com/watch?v=c48pinD4Cso)

6. **CrossScanner- Mac:** CrossScanner is a universal way to run any software by 1 or 2 switches. With the switch(es) plugged into my SAM-Trackball, SwitchHopper, Switcheroo, Cordless Switch Interface, or SAM-Joystick, or any switch interface at all, the user is able to perform mouse moves and clicks, double clicks, drags, operate menu's and even enter text (with optional OnScreen keyboard). The user interface is incredibly intuitive. All operation is supervisor-controllable to fine tune CrossScanner to the needs of the user.

**How is this useful?**

7. **Dragon Dictate Speech Recognition for Mac OSX by Nuance:** Dragon Dictate for Mac lets you to dictate, edit, transcribe and control your computer — quickly and accurately — all by using your voice.

- Flexible voice commands let you get things done quickly with just your voice.
- Smart Format Rules automatically adapt to how you want abbreviations, numbers and more to appear, so you don't have to correct it every time.
- Easily create custom word lists and macros for frequently used text.
- Transcription capabilities to transcribe your voice memos into text.

With up to 99% accuracy, make fewer edits and get more done.

**How does it work?** [https://www.youtube.com/watch?v=UuABO8nEX44](https://www.youtube.com/watch?v=UuABO8nEX44)
8. **Flexible USB Keyboard**: This device is so flexible; you can roll it up and bring it everywhere. This flexible keyboard is made of a high quality silicone, which offers the perfect combination of practicality, durability, comfort and flexibility, ideal for laptop computers.

*How does it work?* Simply plug the keyboard into a USB port of your computer.

9. **Gyration Ultra Cordless Optical Suite (keyboard & mouse):**

   Mouse:
   - Extra long 7.6 m radio range. Line of sight not required!
   - Use up to eight devices with one receiver with digital security features
   - Optical - no moving parts to wear out or get dirty
   - Gyroscopic motion sensor for use off the desktop
   - Long life rechargeable battery with convenient desktop charging cradle
   - **Windows and Mac compatible scroll wheel**
   - Plug 'n play USB, no special drivers or software needed
   - Ergonomically designed for comfortable desktop and in-air use

   Keyboard:
   - RF range of up to 30 m* with no line-of-sight limitations
   - Standard 88-key keypad with high-quality tactile feel includes special Windows Start and drop-down menu keys
   - 15 conveniently located Internet and multimedia hot keys
   - 8 channels* and 36,800 unique addresses provide transmission security
   - Small, lightweight design makes it the perfect keyboard for traveling presenters
   - Snap-on keyboard cover is included to protect keys during transport
   - Uses standard Windows keyboard drivers - no special software required
   - Receiver connects to computer via USB port

*How does it work?* Simply plug in to the USB port in your device.
10. **I Can Email (Mac) by RJ Cooper**: A simple, but powerful, full-screen, talking email program. Designed for those with cognitive challenges, visual challenges, as well as physical challenges. For the user, it operates in a sequential manner, where it asks one question at a time, such as "Who would you like to send this to?" or "If you'd like to speak your message, you can do that here."

- No reading is necessary because it talks, talks, talks :)

The email 'partner' (the recipient or sender) sends and receives mail without any special software at all! To him/her it is just like emailing with anyone else.

I Can Email can also let the user send/receive mail from other users on their system, without even using the Internet at all, even to themself for practice. AND YOU CAN EVEN ACCESS AOL, HOTMAIL, ETC., through a third party program, IzyMail!

- Works with keyboard (**IntelliKeys**, **BigKeys**), or pointing device (**Magic Touchscreen**, **SAM-Joystick**, **SAM-Trackball**), or **CrossScanner** for single switch.

There is even an option to operate I Can Email by voice, any voice, even the voice of an Augmentative Communication device!

**How does it work?** Using the disc, download the software to your Mac.

11. **Intuos Creative Pen & Touch Tablet by Wacom**: A great choice for anyone having fun with photos, drawing, or sketching, or just creating projects on your computer! The Intuos pen & touch small gives you all the advantages of working with a pen on your computer. It also adds the benefits of a touch surface in the same device.

**How does it work?** [https://www.youtube.com/watch?v=kdbRreNjFEk](https://www.youtube.com/watch?v=kdbRreNjFEk)

12. **Large Blue Switch (Big Red Switch by Ablenet)**: True to its name, the Big Red switch (LRC has it in blue) features a 5-inch activation surface, making it the best choice for persons with visual impairments and persons with physical disabilities who require a larger target area. Also includes a clear snap cap for symbol use.

**How does it work?** [https://www.youtube.com/watch?v=aRAIOIrIPM](https://www.youtube.com/watch?v=aRAIOIrIPM)
13. **LEAP Motion Controller**: The Leap Motion controller is a small USB peripheral device designed to be placed on a physical desktop, facing upward. Using two monochromatic IR cameras and three infrared LEDs the device observes a roughly hemispherical area, to a distance of about 1 meter (3.28084 feet). The LEDs generate a 3D pattern of dots of IR light and the cameras generate almost 300 frames per second of reflected data, which is then sent through a USB cable to the host computer, where it is analyzed by the Leap Motion controller software using "complex maths" in a way that has not been disclosed by the company, in some way synthesizing 3D position data by comparing the 2D frames generated by the two cameras.

*How does it work?* [https://www.youtube.com/watch?v=gby6hGZb3ww](https://www.youtube.com/watch?v=gby6hGZb3ww)

14. **MacSpeech Scribe Transcription software by Nuance**: MacSpeech Scribe is the world's most advanced personal transcription solution for the Macintosh. MacSpeech Scribe lets you forget about the painstaking task of typing, and instead create text documents directly from spoken-word audio files. Just open your spoken-word audio file with MacSpeech Scribe, click the 'Transcribe' button, and MacSpeech Scribe does the transcription work for you.

*How does it work?* [https://www.youtube.com/watch?v=3BN5MQbQvbQ](https://www.youtube.com/watch?v=3BN5MQbQvbQ)

15. **Magic Touch Screen Overlay by Keytec, Inc. (LRC has 2 sizes)**: This device instantly converts any standard monitor (LCD & CRT) or notebook computer into a touch-interactive device.


16. **Orbi Touch Keyboard by Blue Orb**: OrbiTouch has helped individuals with disabilities or injuries become more productive, connected, and most of all, independent. Whether used for personal or work purposes, orbiTouch is a powerful communication tool that is simple to learn and easy to use. Domes replace keys to minimize hand and wrist exertion, creating a pain-free typing experience. OrbiTouch Keyless Keyboard requires no finger or wrist motion to operate. A full 128-character keyboard and mouse in one, orbiTouch is an ergonomic alternative to the standard keyboard.

*How does it work?* [https://www.youtube.com/watch?t=45&v=jdlRL_liTY](https://www.youtube.com/watch?t=45&v=jdlRL_liTY)
17. **Perceptual Motor Trainer by enabling devices:** Improves eye-hand coordination! This special training aid helps teach eye-hand coordination. Just tape a design to the plate (such as a simple line or a letter of the alphabet) and begin tracing a path with the child’s pencil. When the pencil strays off path and contacts the metal base, a buzzer sounds and a light goes on, reinforcing motor learning with visual and auditory cues.

*How does it work?* User’s Guide: [https://enablingdevices.com/files/downloads/7d7e0a8e-2f9c-49e6-9401-6a34e22c6720.pdf](https://enablingdevices.com/files/downloads/7d7e0a8e-2f9c-49e6-9401-6a34e22c6720.pdf)

18. **Smart Nav Hands Free Mouse by NaturalPoint:** NaturalPoint’s SmartNav is a reliable and accurate, hands-free mouse alternative that allows complete control of a computer by naturally moving the head.

*How does it work?* [https://www.youtube.com/watch?v=0s5iqRpWH9c](https://www.youtube.com/watch?v=0s5iqRpWH9c)

19. **Switch &Glow (purple) by Enabling Devices:** This neon stretchy noodle switch provides you with wonderful tactile and visual experience. The lightest touch on the switch turns on a glowing light while activating any toy or device. Ball color may vary. Not suitable for those who are allergic to latex.

*How does it work?* [https://www.youtube.com/watch?v=SeCErZSwaqY](https://www.youtube.com/watch?v=SeCErZSwaqY)

20. **Switch-enabled AM/FM Radio by Enabling Devices:** This compact switch-adapted boom box has an AM/FM radio. Simply plug your capability switch into the radio/cassette jack to play music. The radio and cassette functions require continuous switch activation to play.

*How does it work?* [https://www.youtube.com/watch?v=SGMDZFTRzdw](https://www.youtube.com/watch?v=SGMDZFTRzdw)

(*This video is for the newer version that has a CD player, but hook up is basically the same.*)

21. **Switch-enabled mouse by enabling devices:** An easy-to-use mouse that allows the user to make a left click selection with a capability switch while an adult controls the mouse movement. Just move the mouse over a desired area on the screen, and then the child activates his or her switch to select the item. Great for teaching cause and effect, directionality, and for increasing visual attention.
**How does it work?** (*installation and user guide included) ***NOTE: You will need to check out one of our switches to use with this!***

22. **Tactile Discs by Gonge:** An inviting tactile material that challenges children's sense of touch on both hands and feet, at the same time developing the ability to describe sense impressions verbally. The tactile discs, made of nice-to-touch synthetic rubber, contain different tactile structures, each with its own color. Each of the tactile structures can be found on a large disc for positioning on the floor, as well as on a small disc that the child will be able to hold in his/her hands. The discs offer innumerable possibilities in terms of playing ranging from a fundamental sensing of the tactile structures to blindfold games based on memory and recognition. The games can be adjusted so they fit the child’s age and level of functionality. The new structures make playing with our Tactile Discs even more challenging, as children now have to choose between several different tactile sensory impressions.

*How do these work?* [https://www.youtube.com/watch?v=tpor9SM3sQs](https://www.youtube.com/watch?v=tpor9SM3sQs)

23. **Trackpad by Cirque Easy Cat:** The Cirque Easy Cat® AG touchpad makes it easier and more comfortable than ever to control your computer. To perform basic mouse functions, simply glide your finger over the smooth surface to point, then tap on the pad or press on the buttons to click or activate vertical scroll by simply gliding a finger along the right edge of the touchpad. Use an easy cat, instead of a traditional mouse and your wrists will thank you. Easy Cat’s compact size makes it a perfect traveling companion for your laptop.

*How does it work?* [https://www.youtube.com/watch?v=MJCsjCXMBU8](https://www.youtube.com/watch?v=MJCsjCXMBU8)

24. **USB Switch Click (blue) by Tash:** USB Switch Click allows you switch access to your computer. It acts as a left mouse click and works with a switch accessible or scanning software that uses a left mouse click. Switch Click plugs into any USB port on your computer. The standard keyboard and mouse are still functional when using USB Switch Click.

*How does it work?* [https://www.youtube.com/watch?v=71eLoxoTwEA](https://www.youtube.com/watch?v=71eLoxoTwEA)
25. **Wireless Switch Interface by QuizWORKS Company:** The USB Wireless Switch Interface is the wireless link between single switch input devices and Macintosh or PC/Window computers with USB capabilities. The interface is utilized by software written for one to five single switches. Primarily used in the special needs area.

*How does it work?* Watch a tutorial on how to use: http://www.quizworks.com/wireless_switch_interface.html

***CLICK the Tutorial button at the bottom of page!***

26. **Wireless Switch with Receiver (The LRC has 2: 1 Red and 1 Yellow) by Ablenet:** Plug into any switch-adapted device, from battery operated toys and electric appliances to your classroom's digital camera or computer. Each switch is uniquely paired with its receiver, allowing multiple students to use their own Jelly Beamers at the same time, from as far away as 30-feet, without interfering with one another.

*How does it work?* https://www.youtube.com/watch?v=WZgJmBi2tco

27. **High Roller Dice Rolling Machine by Enabling Devices:** Enabling Devices created an adapted dice roller so everyone can join in on the fun. Simply open the Velcro top and place in up to five dice. Push the outer rim or add your capability switch to activate the dice. The dice will shake, rattle and roll! Use High Roller for learning number recognition.

*How does it work?* https://enablingdevices.com/10802fc1-ae79-49a0-832b-1d639e005ad4.pdf

28. **Rubber Weighted Textured Balls (set of 3) by Abilitations Integrations:** This is a set of 3 weighted, textured handballs that are perfect for squeezing, manipulating, tossing or adding weight. Each set contains a 1/4, 1/2 and 3/4 lb. weighted ball perfect for small hands. Balls can be inflated or deflated to your needs and contain a sand mixture for great stress reduction too! Does not contain latex.

29. **Switch-enabled Fire Truck by Kid Galaxy:** This truck is squeezable and soft, and its chunky shape makes it perfect for little hands. One button makes it spin while the other makes it go straight. (*Check out the switch-enabled fire truck controller to use with truck separately).*
30. **Switch-enabled Fire Truck Controller by Kid Galaxy:** This is the controller, or switch, that controls the fire truck. Simply connect the two, and begin to control!

31. **Switch-enabled Puppy by Charm Co.:** This puppy is very soft to the touch and will bark and move at the touch of a switch. (*Check out a switch separately)

32. **3M Ergonomic Mouse (wireless):** This mouse is clinically proven to alleviate pain and discomfort of repetitive stress injuries in the hand, wrist or arm associated with the use of traditional mice - which requires forearm pronation and may cause pressure on the wrist and carpal tunnel area. The 3M Ergonomic Mouse has earned an ease-of-use commendation from the arthritis foundation for its patented, vertical grip design that keeps your hand and wrist at a neutral angle, while the mouse works as a regular optical mouse. Grip the handle and rest your hand on the base.

*How does it work?* [https://www.youtube.com/watch?v=PIyHzdChdJ8](https://www.youtube.com/watch?v=PIyHzdChdJ8)