



# Spinal Cord Injuries and Assistive Technology

*A brief list of assistive technology that may be beneficial for individuals whom have suffered a spinal cord injury.*

*\*Special thanks to Paint the Streets 5K in memory of Carlene Hall for helping to provide equipment for demo and loan.*

Please contact T.A.S.C. for free informational sessions, to schedule an evaluation, to borrow a device or software, or for additional training.

(256) 859-8300 [tasc@ucphuntsville.org](mailto:tasc@ucphuntsville.org) [www.ucptacsc.org](http://www.ucptacsc.org)

## ■ Computer Access

- Microsoft Accessibility Wizard
  - On all Windows computers there is an easy Accessibility Wizard to help identify tools within the operating system to make it easier to use.
  - Start>All Programs>Accessories>Accessibility>Accessibility Wizard
- Voice Activation
  - \*Dragon Naturally Speaking
  - Windows Operating System
- Alternative Mouse
  - Clicking Utility- <http://www.polital.com/pnc/>
  - Trackball/Marble mouse—mouse stays stationary, move ball around. Can be used with other body parts like the foot, elbow, chin, etc.
  - Touch Pad—Standard with most laptops, can be purchased as USB.
  - Foot Mouse-Mouse operated by pushing pedals with the foot.
  - Head Mouse—Infrared dot used on head, nose, chin, etc. and camera on computer tracks the movement of the dot.  
(Free utility: <http://www.cameramouse.org/>)
  - \*Joystick Mouse-Control computer with joystick.
  - Switch Access Mouse Utility—Software program that provides menu for person to use switch to select which way mouse moves.
    - Cross Scanner-- <http://www.imgpresents.com>  
<http://www.rjcooper.com>
    - Scan Buddy- <http://www.ahf-net.com>
  - \*Wireless Computer Access Switch
  - \*Impulse Bluetooth Switch
  - Eye Gaze—Mouse controlled by eye movement.
- Alternative Keyboards
  - One handed typing-<http://www.aboutonehandtyping.com/>
  - On-screen keyboard-provides a way to type using an application that runs within most Windows' program.
    - Windows free version in Accessories Folder
    - Click-N-Type - <http://www.lakefolks.org/cnt/>
- E-Books- access to books in electronic format
  - Bookshare.org; Kindle; Ebooks.com ; iPad

Technology Assistance for Special Consumers —  
A Program of United Cerebral Palsy of Huntsville and Tennessee Valley, Inc.  
**TASC**





- **Environmental Control**
  - Capabilities Switches
    - \*Wireless Ultimate
    - \*Tilt Switch
    - \*Button Click Switch
    - \*Possum Chin Switch
    - \*Big Red Twist Switch
    - \*String Switch
    - \*Impulse Switch
    - \*Microlight
    - \*Impulse Switch
    - \*Pillow Switch
    - Sip N Puff
  - Switch Activated
    - \*Powerlink
    - \*Relax
    - \*Switch Adapted MP 3 Player
    - \*Click-On
  - Infrared Controlled light switches (X-10; Z-Wave)
  - Voice Activated Environmental Control
    - \*IntelaPlug
    - \*Acenda Voice Control for iPod
    - Invoca TV remote
    - \*SiCare
  - Simple Solutions
    - As Seen On TV
      - Light with String
      - Light Switch Anywhere
    - Oversized TV Remote
      - \*Wireless Doorbell (call button)
  - Vendors of Home Adaptation
    - <http://www.broadenedhorizons.com/>
    - <http://www.saje-tech.com/>
    - <http://www.breakboundaries.com/>
    - <http://www.smarthome.com>
- **IPad**
  - Communication Apps
    - \*Predictable
    - Speak It
  - Switch Access
    - \*Bluetooth Super-Switch
    - \*Bluetooth Switch Interface
  - Mounts
    - \*SeaSucker





- **Communication**
  - Low Tech Solutions
    - Voice Amplification
    - Eye Gaze Frame
    - Flip Communication Book
    - Yes/No Switch
  - High Tech/Dynamic Communication Devices
    - Augmentative and Alternative Communication Devices (AAC) enable a person to communicate using pre-programmed messages as well as create new messages through typing. (Also known as Speech Generating Devices (SGD) or Augmentative Communication Devices (ACD) )
    - AAC devices vary greatly and it is important to have the opportunity to try several devices prior to making a decision.
      - Dynavox-- <http://www.dynavotech.com>
      - FRS- <http://www.frs-solutions.com/>
      - Prentke Romich -- <http://www.prentrom.com/>
      - Words+ -- <http://www.words-plus.com/>
    - The High Tech/Dynamic AAC devices are basically computers and many have the ability to learn infrared in order to control the environment like the television or stereo.
    - Individuals can access or use the devices in different ways:
      - Typing
      - Mouse/Joystick
      - Direct Selecting on Touch Screen
      - Head Mouse
      - Switches and Scanning
      - Eye Gaze (Move eyes, move cursor)
    - Funding an AAC device
      - Medicare and most private insurance will fund AAC devices but there are specific requirements that must be met:
        - AAC Evaluation by a Speech Therapist who has continuing education in AAC
        - Individual must not currently be served in a skill nursing care facility or hospice
        - Insurance will only fund a device every 5-7 years, so it important to chose a device that will work for many years.
        - Insurance will fund the purchase of switches, head mouse, eye gaze, or mounting devices if there is a change in medical condition making it impossible to continue to use an AAC device.
        - Federal Blue Cross/Blue Shield only provides very limited funding for AAC devices (June 2011).



- **Where to find AT support:**
  - Employer
    - Must provide accommodations in workplace
    - Federal Employees have access to CAP (Computer/Electronics Accommodations Program). <http://www.tricare.mil/CAP/index.cfm>
    - Job Accommodation Network (<http://www.jan.wvu.edu/>)
  - Alabama Head Injury Foundation
    - <http://www.ahif.org/>
  - Alabama Department of Rehabilitation Services
    - Vocational Rehabilitation
    - SAIL (State of Alabama Independent Living/Homebound Service)
    - 1-800-441-7607
    - <http://www.rehab.state.al.us>
  - Technology Assistance for Special Consumers (T.A.S.C.)
    - Free demonstrations & information
    - Lending library
    - Training
    - Assistive Technology Evaluations (Identify what tools may best assist in doing a specific evaluation)
    - Communication Evaluations (How to communicate if voice is unintelligible; may be referred as AAC, ACD, or SGD)
    - [www.ucptasc.org](http://www.ucptasc.org)
    - (256) 859-8300
  - STAR centers (Alabama's Assistive Technology Resource)
    - Centers throughout the state
    - Provide reutilization of durable medical equipment at no cost (walkers, lifts, shower chairs)
    - Alternative Finance Program (loan program for helping finance AT)
    - <http://www.rehab.state.al.us>
  - Assistive Technology Websites
    - <http://www.ataccess.org/>
    - <http://www.microsoft.com/enable/>
    - <http://www.abledata.com/>
    - <http://www.christopherreeve.org>

