Assistive Technology to Assist Persons with Parkinson's Disease

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Objectives

- Review assistive technology options to assist with:
 - Computer access
 - Mobile phone and tablet access
 - Environmental Control
 - Communication

Assistive Technology

Any item, piece of equipment or product system whether acquired commercially off the shelf, modified, or customized that is used to increase or improve functional capabilities of individuals with disabilities.

PL 100-407 Technical Assistance to the States Act



Assistive Technology for Parkinson's Disease

- Cooking
- Eating
- Dressing
- Bathroom
- Computer Access
- Mobility
- Communication
- Organizing



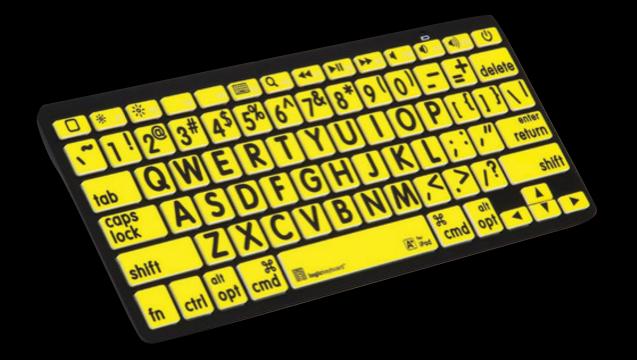




Computer Use

Keyboard Alternatives

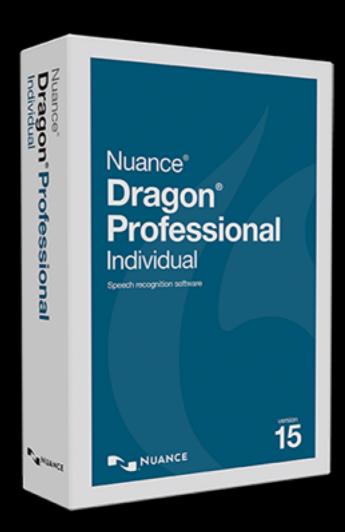
- Large key keyboard
- Keyguard





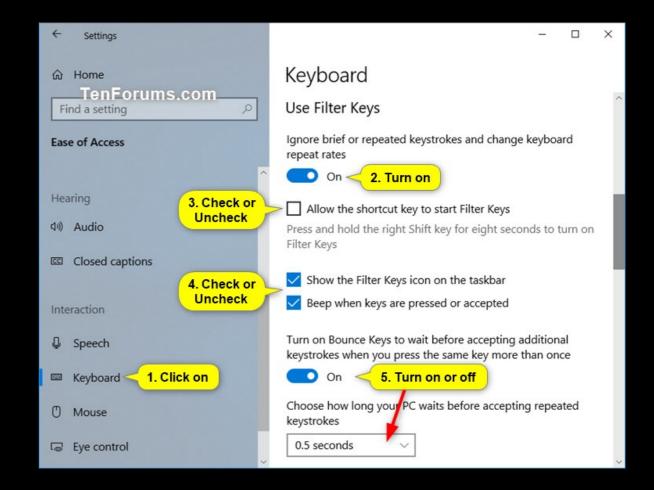
Keyboard Alternatives

Speech Recognition



Keyboard Settings

- Slow Keys
 - Disregard keystrokes that are not held down for a specified period of time
- Repeat Keys
 - Turns off repeat feature



Mouse Alternatives

- Stationary Devices
- Head Control
- Eye Gaze
- Tremor Control



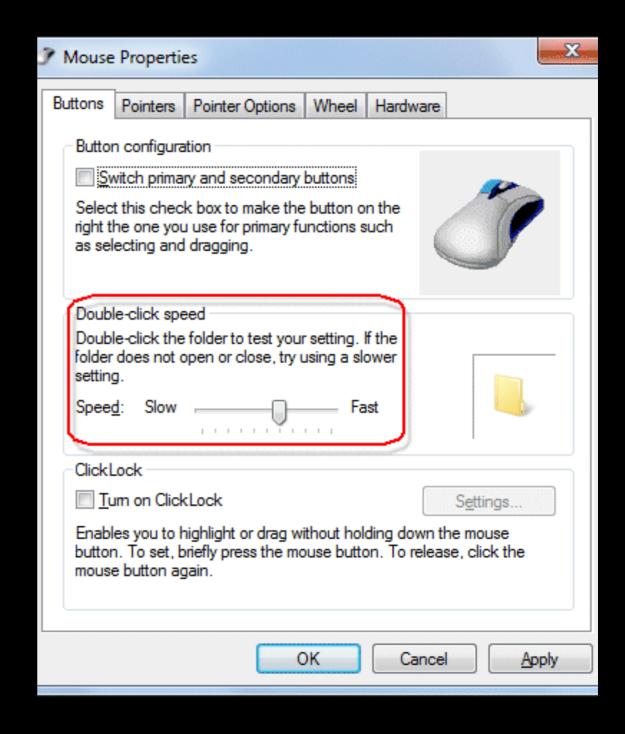






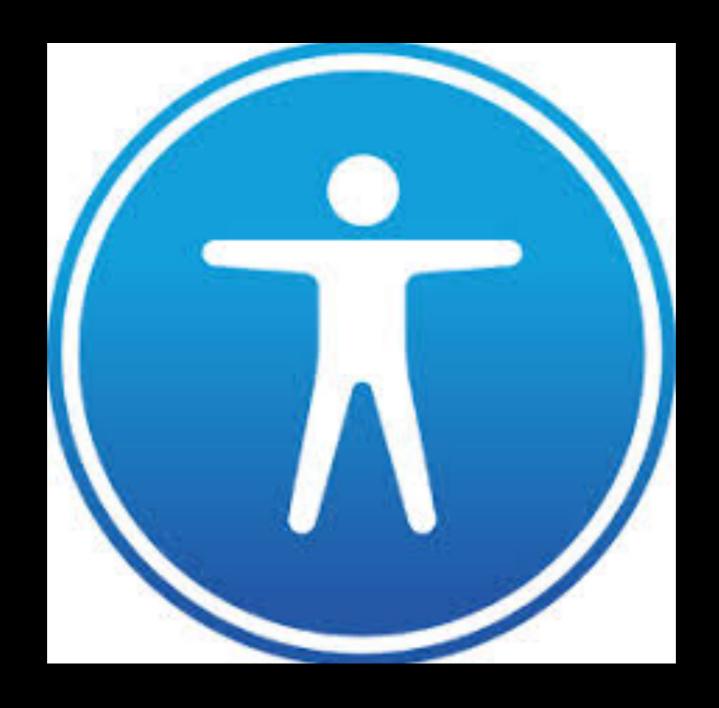
Mouse Settings

- Tracking / Cursor Speed
- Double Click Speed
- Mouse Keys



Mobile Devices

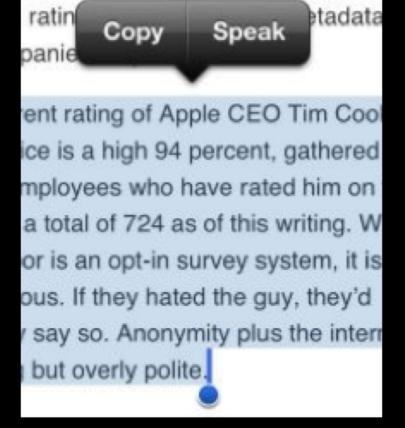


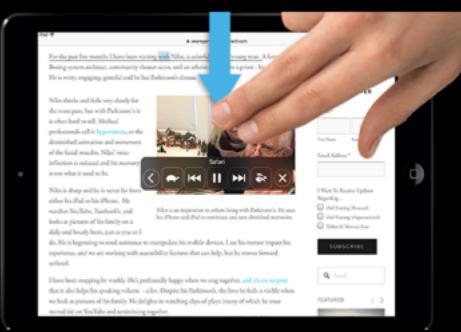


iOS Accessibility Features

Speech

- Speak Selection
- Speak Screen





Vision

- Zoom
- Magnifier
- Larger Text

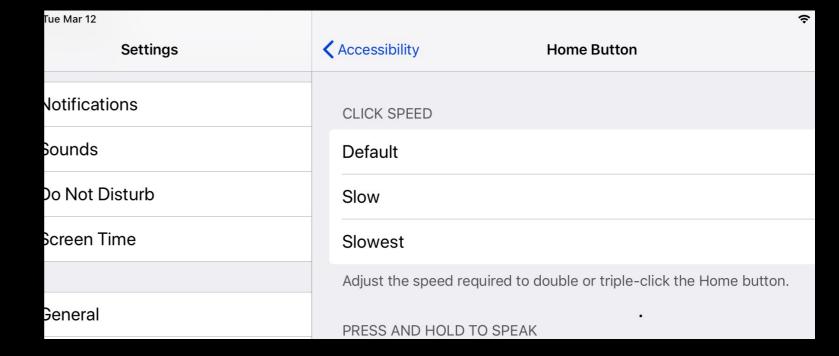




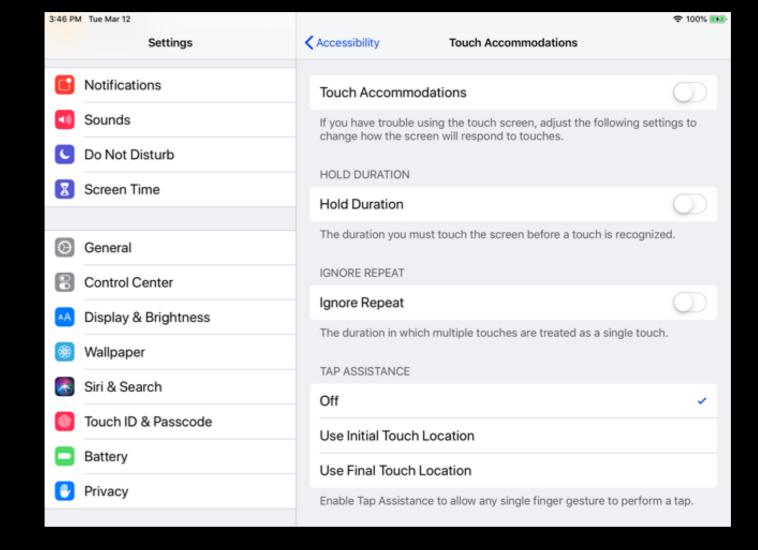
Assistive Touch



Home Button



Touch Accommodations



Speech Control

- Siri
- Dictation

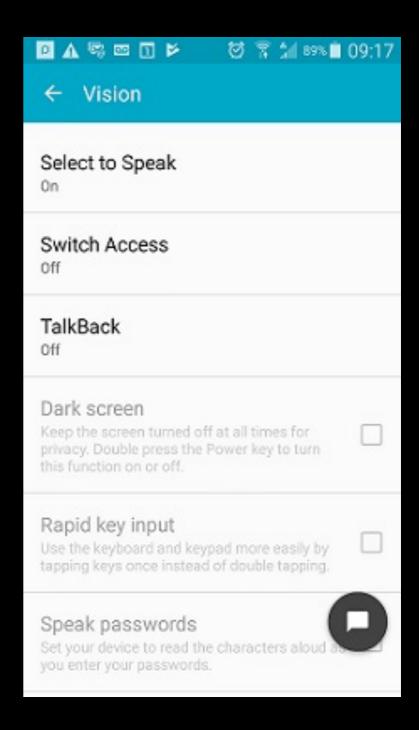




Android Accessibility
Features

Speech

- Select to Speak
 - Part of Accessibility Suite

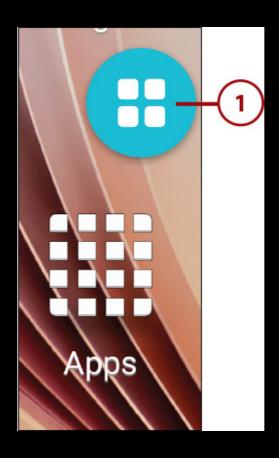


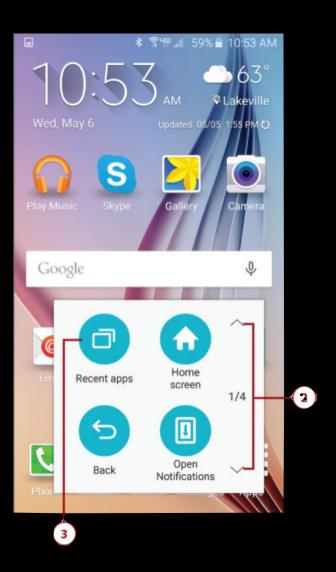
Vision

- Font Size
- Magnification
- High Contrast Keyboard



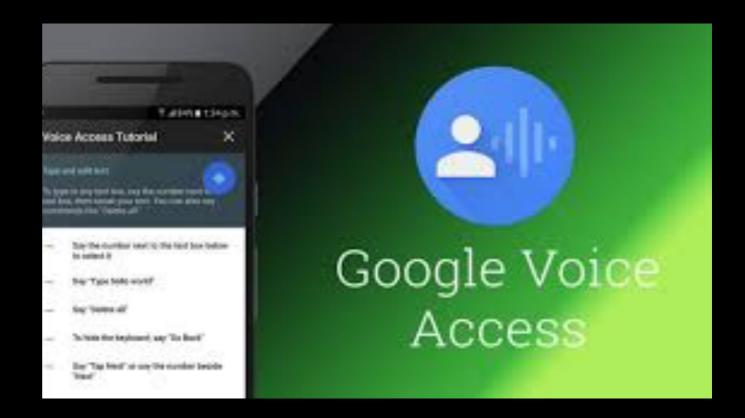
Assistant Menu





Speech Control

Voice Access





Performance Enhancers

Physical Enhancers

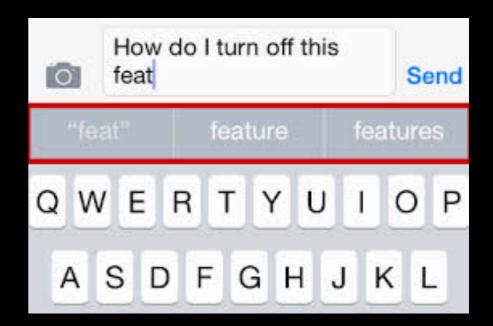
- Pointer / Typing Splint
- Forearm Supports





Software Enhancers

- Word Prediction / Auto Correct
- Text Replacement



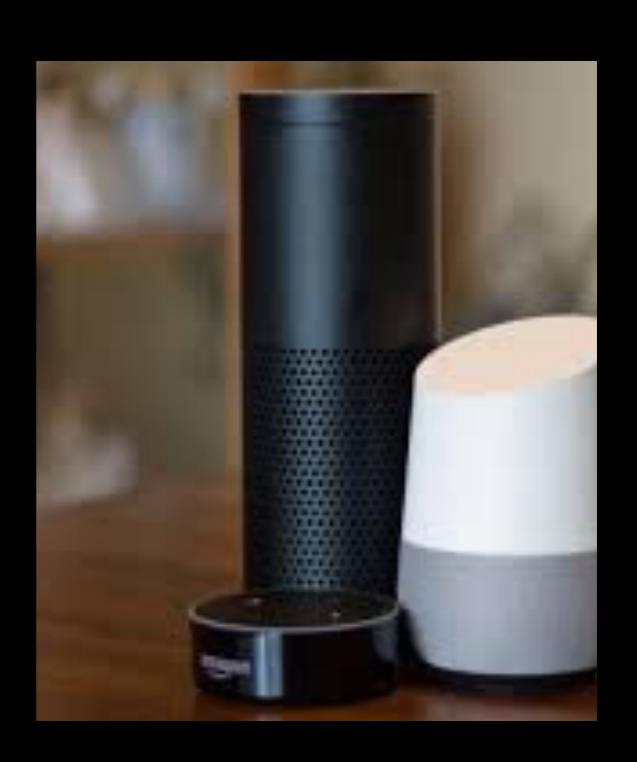




Environmental Control

Smart Speakers

- Amazon Echo
- Google Home



Smart Speakers

- Safety
- Phone calls
- Alarms
- To do lists
- Calendar Integration
- Control lights, thermostats
- Shop



Safety

- Works with Amazon Alexa and Google Home
- Use voice to send alerts
 - Phone, Text, Email
- "Alexa Ask My Buddy to Alert Everyone"



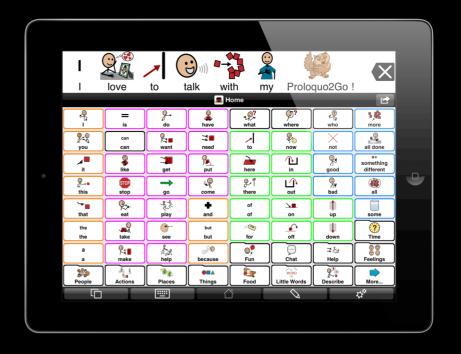


Communication

Alternative Augmentative Communication

- Dedicated devices
- Integrated devices





Resources

- Missouri Assistive Technology
- Illinois Assistive Technology Program





Lets Try It

Dictate on iPhone

- Open Settings app from Home screen
- Select General
- Select Keyboard
- Select the On/Off switch next to Enable Dictation
- Open a text entry app and then tap the Dictation key on the keyboard and speak a message.

Dictate on Android

- Open a text entry app
- Tap the mic icon on the keyboard
- Speak a message

Thank You

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