Wireless Independence Now

An Overview of Smartphone Accessibility Features

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• General Questions
• What is Accessibility
• iOS and Android Accessibility Features
• Assistive and Accessibility Apps
• Accessibility Resources
Questions for the Group

• What type of phone or tablet do you have?
• What do you like about your device?
• What do you not like about your device?
• How did you choose your device?
Accessibility – what does that mean?

- Wireless accessibility is the ability to access and benefit from mobile phones and tablets.
- Accessibility means that a product, device, service, or environment is available and usable to as many people as possible.
Demonstration of iOS & Android Accessibility Features
Apple Accessibility Features
Apple Accessibility Features

VISION
- VoiceOver: Off
- Zoom: Off
- Invert Colors
- Grayscale
- Speech

Enabling Invert Colors or Grayscale will automatically disable Night Shift.

LARGER TEXT
- Larger Text: Off
- Bold Text
- Button Shapes
- Increase Contrast
- Reduce Motion

INTERACTION
- Switch Control: Off
- AssistiveTouch: Off
- Touch Accommodations: Off

3D Touch: On
- Keyboard
- Shake to Undo: On
- Vibration: On
- Call Audio Routing: Automatic
- Home Button: Default
- Reachability: Off

Double-tap the home button to bring the top of the screen into view.

HEARING
- Hearing Aids
- LED Flash for Alerts
- Mono Audio
- Phone Noise Cancellation

Noise cancellation reduces ambient noise on phone calls when you are holding the receiver to your ear.

Adjust the audio volume balance between left and right channels.

MEDIA
- Subtitles & Captioning
- Audio Descriptions: Off
Android Accessibility Features
Android Accessibility Features

Services
- TalkBack
  - Off
- Switch Access
  - Off

System
- Captions
  - Off
- Magnification gestures
  - On
- Large text
  - On
- High contrast text
  - Off

Power button ends call
- On

Auto-rotate screen
- On

Speak passwords
- On

Accessibility shortcut
- On

Text-to-speech output
- On

Touch & hold delay
- Short

Display
- Color inversion
  - Off
- Color correction
  - Off
Accessibility Features Helpful for Everyone

Apple Devices (iPhone/iPad):
- Siri – Intelligent Virtual Assistant
- Accessibility Shortcut

Android Devices (LG, Samsung, HTC Phones/Tablets):
- Google Now and Ok Google – Intelligent Virtual Assistant
- Accessibility Shortcut
Apple: Siri – Voice Control

Press and hold the Home button or say, “Hey Siri!”

Image courtesy of Apple
Android: Ok Google – Voice Control

Type in the search bar on top or just say, “Ok Google!”
Android: Accessibility Shortcut

When this feature is turned on, you can quickly enable accessibility features in two steps:

Step 1: Press and hold the power button until you hear a sound or feel a vibration.

Step 2: Touch and hold two fingers until you hear audio confirmation.

If the device has multiple users, using this shortcut on the lock screen temporarily enables accessibility until the device is unlocked.
Accessibility Features for People who have Difficulty Hearing

**Apple Devices (iPhone):**
- Vibrate on Ring
- LED Flash for Alerts
- Video Calling
- Hearing Features
- Subtitles & Captioning

**Android Devices (LG, Samsung, HTC, Motorola Phones):**
- Also Vibrate on Ring
- Pulse Notification Light
- Video Calling
- Hearing Features
- Captioning
Apple: Vibrate on Ring, LED Flash for Alerts

Vibrate on Ring

LED Flash for Alerts
Apple: Video Calling (FaceTime)
Apple: Built-in Hearing Features

- **Hearing Aids**
  - LED Flash for Alerts
  - Mono Audio
  - Phone Noise Cancellation

  Noise cancellation reduces ambient noise on phone calls when you are holding the receiver to your ear.

- **Adjust the audio volume balance between left and right channels.**

  **MEDIA**

  **Subtitles & Captioning**

  **Video Descriptions**

- **Hearing Aid Mode**

  Hearing Aid Mode improves audio quality with some hearing aids.

  **Devices**

  **Pair Made for iPhone Hearing Aids. Other hearing aids are paired in Bluetooth settings.**
Android: Vibrate for Calls & Pulse Notification Light

- Settings
  - Wireless & networks
    - WiFi
  - Bluetooth
  - Data usage
  - More
- Device
  - Display
  - Sound & notification
  - Apps

Also Vibrate for Calls

- Sound & notification
  - Sound
    - Media volume
    - Alarm volume
    - Ring volume
  - Also vibrate for calls
  - Do not disturb
  - Phone ringtone
    - Aria
  - Default notification ringtone
    - Hangouts Message
  - Other sounds

Pulse Notification Light

- Notification
  - Pulse notification light
  - When device is locked
    - Show all notification content
  - App notifications
    - Advanced
      - Notification access
        - Apps cannot read notifications
    - Do Not Disturb access
Android: Video Calling (Hangouts)
Android: Hearing Features
Apple: Subtitles & Captioning

Adjust the audio volume balance between left and right channels.

MEDIA

Subtitles & Captioning

Audio Descriptions Off

LEARNING

Guided Access Off

Accessibility Shortcut Off

Closed Captions + SDH

When available, prefer closed captioning or subtitles for the deaf and hard of hearing.

Style Default
Android: Captioning

Services
- TalkBack: Off

Switch Access
- Off

System
- Captions: Off
- Magnification gestures: On
- Large text
- High contrast text: On

Captions
- Standard options
  - Language: Default
  - Text size: Normal
  - Caption style: White on black
Made for iPhone Hearing Aids

Examples of Made For iPhone Hearing Aid Manufacturers:

- Audibel
- Audigy
- Beltone
- Cochlear
- Microtech
- NuEar
- Resound
- Starkey

Manage settings directly on iPhone
Android Hearing Aid Apps

Hearing Aid Manufacturers offering Third Party Apps for Android:

- Beltone
- NuEar
- Resound
- Starkey

Example – 3rd Party TruLink App
<table>
<thead>
<tr>
<th>Hamilton CapTel</th>
<th>TruLink</th>
<th>What’s App</th>
<th>Skype</th>
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<tr>
<td>• Listen to your phone conversations while reading word-for-word captions of what's said to you</td>
<td>• Connects your hearing aids to your Android or iPhone</td>
<td>• Simple real-time instant messaging</td>
<td>• Free instant messaging, voice or video calls</td>
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<tr>
<td></td>
<td>• Easily adjust volume and customize performance to unique situations.</td>
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Accessibility Resources

• AT&T Accessibility (download presentations) – att.com/accessibility
• AT&T Digital You – digitalyou.att.com
• AT&T for Disability and Aging for Wireline Services – Voice: 1-800-772-3140; TTY: 1-800-651-5111
• Wireless RERC – wirelessrerc.org
• LiveWell RERC – livewellrerc.org
• FCC Accessibility Clearing House – ach.fcc.gov
• Global Accessibility Reporting Initiative (GARI) – gari.info
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