

# Using Your Cell Phone as an ALD

This is an update on *Using Your Cell Phone as an Assistive Listening Device* originally compiled in September of 2015. It now includes information from a NCHATT training and is somewhat accurate to March of 2016. New material is in Blue to save time for return readers.

This information is provided from a collaboration of the American Institute for Research (AIR), Hands and Voices, Gallaudet University, and HLAA to train and help those with hearing loss integrate hearing assistive technologies in daily life. This was also a part of the NCHATT training by HLAA

Mention of goods or services does not mean endorsement, not does exclusion suggest disapproval.

Our August HLAA KY Home meeting focused on cell phone Apps that are designed to assist the deaf and hard of hearing. The following is adapted from a Presentation at the HLAA National Convention, June 2015, by Perry C. Hanavan, Au.D. Augustana College, Sioux Falls, SD.

It is important to note that Dr. Hanavan's disclaimer applies in this article as well. "I [we] have no relevant financial or nonfinancial relationships in the products or services described, reviewed, evaluated or compared in this presentation. [We have not personally tested them.]

One might also pause and review our previous articles *What You Need To Know About ALDs, ALSs and HAT*, and *Finding A Hearing Aid Compatible (HAC) Cell Phone* at <http://www.hearinglosskyhome.org/laypersons-guide.html> .

It is the intent of this article to take a commonly owned tool, a smart phone, and convert it to an Assistive Listening Device, an ALD. Some of the following apps are free and easily available for Apple, Android and MS phones. Others will have a fee. As always, be a good consumer. Read the fine print. Know what you are choosing to give in return for free items. For some people certain requirements are worth it; for others, it is not. You will have to do some homework and either google or go to your App store for more information. This is just a starting point as to what to look for at your App store.

Cell phones are smarter than ever before. Cell phones are more present in our lives. It is easy, therefore, to consider Hanavan's "Digital Swiss Army Knife" description. Smart phones have every requirement of an assistive listening device. They are/have:

- Mobile/portable
- Volume control/Speaker phone
- Direct Audio Input (DAI)/Loop compatible (wired connection between hearing aids/cochlear implant and an audio device)
- Bluetooth (a wireless technology standard for exchanging data over short distances (using short-wavelength UHF radio waves
- Tele-coil compatibility/HAC features (Telecoil is a small electromagnet placed in a Hearing Aid/Cochlear Impant [HA/CI] to aid communication. HAC refers to an FCC Hearing Aid Compatibility Standard.)
- Closed Captioning (Captioning visible only to the viewer selecting it)
- Text communication
- Communication Apps (application software, a computer program designed to run on mobile devices
- Increased audio bandwidth (allows digital and high definition sound)
- Audio, visual, haptic (Vibration) features
- Video conferencing (Skype, FaceTime, Google Hangouts)
- Electronic media (Internet, movies, music, etc.)

Thus, it has everything needed to become an ALD. One can link hearing aids/cochlear implants to a cell phone through a Bluetooth connection, Tele-coil, a Streamer/ComPilot, or a wired connection called a Direct Audio Inpant (DAI). The smart phone or App Phone is basically a mini computer that can access the internet or have programs in its memory that can help a hard of hearing/deaf person.

A few more definitions are needed to understand the App information:

- PSAP is a **Personal Sound Amplification Product**.
- iOS mobile operating system created and developed by Apple
- Android mobile operating system (OS)
- Mfi **Made For I-Devices** (Apple licensed)

**Mobile Operating Systems** – for smartphones, tablets, PDAs or other mobile devices

Android – from Google, Inc.; largest installed base worldwide on smartphones; free and open-source software, but software bundled with it can be proprietary and closed source; Google Play storefront

iOS – from Apple, Inc.; second largest installed base worldwide on smartphones; proprietary and closed source; iTunes AppStore storefront

Windows 10 Mobile (Windows Phone) – from Microsoft; third largest installed base worldwide on smartphones; proprietary and closed source; Microsoft Store storefront

BlackBerry 10 – from BlackBerry; proprietary and closed source only for phones and tablets manufactured by BlackBerry; BlackBerry App World storefront

➤ **The following Apps are PSAPs:**

Mimi Hearing Amplifier (free) iOS (for mild hearing loss)

Petralex (free) (iOS)(Android)

Jacoti ListenApp (free) iOS

FDA approved, optimized for use with Apple EarPods  
and personal audiogram

Speak It (Android)(free) (voice to text)

Virtual Voice (Android)(free) (speech to text)

**Sound Amplifiers**

EARs

uListen

SoundAMP R

➤ **-Personal Amplifier** Think “Pocket Talkers” as your cell phone

BioAid beta (free; iOS)

EarMachine (free; iOS)

Hearing Aid Replay (Lite) (\$3.30 (free); Android)

HearYouNow (free; iOS)

Jacoti ListenApp (free; iOS)

Jacoti Lola Classroom (free; iOS)

Mimi Music (free; iOS)

Petralex (free; iOS, Android)

➤ **Captions:**

Live Caption (\$3.99)(iOS)(Android) This allows a person to use the speaker/microphone of the phone and to receive captions of what was said.

Speech to text

Note, Listen for Deaf (\$3.99)(iOS) Speech to text translations.

Note, Speak, Listen for Deaf (\$0.99; Android)

Dragon Dictation (free)(iOS)

Dragon Dictate (free; iOS)

Deaf - Hearing Chat (\$3.99/\$5.99) Android, iOS

Sorenson BuzzCards (free) iOS Short words or sentences—Coffee/Cream

Iseewhatyousay App for Pebble (\$4.99)

Remote voice-to-text from Android smartphone to wrist worn device via Bluetooth

Let Me Hear Again (free; Android)

Virtual Voice (free; Android)

VoxSci for Mobile (free; iOS) - voicemail

**Captions for Phone Calls**

Hamilton CapTel

Clear Captions

➤ **Speech to Sign:**

Mimix -Speech to Sign Language (free) Android

Motion Savvy with Leap Motion (tablet) 2-way communication for the deaf ASL to Speech/text

➤ **Other Options**

Text Messaging      Instant Messaging      E-mail

ReSound LiNX2/Beltone Legend Can stream audio binaurally from iPhone to hearing aids/no streamer: phone voice, music, movies.

GN ReSound LiNX Smart App

ReSound Smart App (iOS)

First hearing aid app with a direct connection between ReSound LiNX™ hearing aids and iPhone®, iPad® or iPod touch®. Stream phone calls, music, audio from

videos, movies & games, turn-by-turn directions, FaceTime® conversations,  
Siri® Use phone as a microphone receiver (e.g. Pocket Talker)

ReSound (iOS & Android)(free) ReSound Steamers)

ReSound LiNX2/Beltone Legend (Mfi) (iOS) (Android)

Starkey Hearing Halo™

Stream calls, FaceTime®, music from iPhone directly to hearing aids using  
Bluetooth® 4.0 wireless technology.

Remotely control aids with iPhone app

Cochlear™ Baha® 5 Sound Processor (Mfi) Video communication/Live pictures

Cochlear CI Nucleus 6 (Mfi)(future)

ReSound LiNX2 & Starkey Halo HAS (Apple Watch)

Apple Watch Apps for Hearing Aids (can act as a remote to adjust HA)

Oticon MFi

Oticon's MFi solution available for all existing and future users of Oticon's  
ConnectLine instruments

## ➤ *-Hearing Aid Company Apps*

### 1) **Oticon** (Oticon/Sonic Innovations/Bernafon)

Oticon Hearing Diary (free; iOS)

Oticon Medical Rehabilitation Game (free; iOS, Android) – listening practice for children/adults

Oticon Tinnitus Sound (free; Android) – tinnitus

Alta Diary (free; Android)

Connect Line (free; Android)

Sound Gate (free; Android)

### 2) **Phonak** (Phonak/Unitron - Sonova)

Phonak Leo – Interactive Stories (free; iOS) – for children

Phonak Support (free; Android)

Phonak Remote Control (free; Android) – remote

Phonak Tinnitus (free; Android) - tinnitus

### 3) **ReSound** (Resound/Beltone)

ReSound LiNX<sup>2</sup> (free; Android)

ReSound Relief (free; Android) - tinnitus

ReSound Control (free; Android) - remote

Beltone SmartRemote (free; Android) - remote

#### 4) Siemens (Siemens/Rexton)

Siemens Hearing Test (free; iOS) – hearing test  
Siemens touchControl (free; iOS) - remote  
Siemens easyTek (free; iOS) – remote  
Siemens miniTek (free; Android) - remote

#### 5) Starkey (Starkey/NuEar/Microtech/Audibel)

Starkey T<sup>2</sup> Remote (free; iOS, Android) - remote  
TruLink Hearing Control (free; iOS) - remote  
Hear Coach (free; iOS, Android) – listening practice for adults  
Starkey Relax (free; iOS, Android) - tinnitus  
Starkey Hearing Loss Simulator (\$1.99; iOS) – hearing loss simulator  
Starkey Hearing Innovations (free; iOS) – Starkey hearing technology  
Starkey Sound Check (free; Android) – hearing test

#### 6) Widex

Widex Com-Dex (free; Android) – remote

##### ➤ **Mobile Connect:**

Theater App(s)(free)

Transence (app not yet released)

Jacoti Lola (free)(iOS)

Requires Jacoti Lola Hub™, a small application that runs on a Mac/Apple computer and broadcasts the speaker's voice and/or the computer's system audio to connected listeners via WiFi.

LoopFinder App (free)(iOS)

##### ➤ **Closed Captions Smartphone Apps**

ABC Family	NBC
Amazon Instant Videos	Netflix
CaptionFish	PBS
CBS	Subtitles
Cox Communications	TED Talks
CWTV Now	Watch ABC
Discovery	Watch TBS
Hulu Plus	Watch TNT
	YouTube

Netflix (iOS)(Android)(Windows)(free)

Netflix Subtitles

TED (iPhone Android) with TEDiSUB (\$1.99)

YouTube (free)(iOS & Android)

Lyrics Lite (Android/iOS)(free) Gives you Lyrics to music

Shazam (free)(iOS & Android)

SoundHound Windows/Blackberry/iOS/Android (free)

(Can't understand the words—will access them)

NextRadio App (free) Android

Most smartphones have built in FM Radio (Apple has not turned theirs on yet)

## ➤ Alerting

Tap Tap (iOS)(\$2.99)

Myeardroid (Android)(free)

OtoSense (Android, iPhone) \$7.99

Hearing Aide (Android) free

Hearing a pre-programmed warning sound, smartphone alerts users to danger via 20 second vibrations and a message

Roost, Smart Smoke/CO Alarm

Alerts4me, NCIT

Braci Pro (free; iOS)

MyEardroid (free; Android)

## Weather Apps

Weather Radio (free) iOS Android Blackberry

Weather Alert USA (iOS)(\$3.99)

Emergency Email and Wireless Network

## WiFi Baby Monitors to cell phones

Peep WiFi Camera in Door Peephole

Device detects door vibrations, as would occur when someone knocks. Accesses your home WiFi network and notifies you via an app on your mobile device(s)  
App shows live video of who's at the door, whether you're at home or elsewhere

➤ **Free Face to Face Communication**

FaceTime • ooVoo • Skype • Hangouts • Viber • Imo • Fring • Line • Tang

➤ **Hearing Tests**

Hearing Test, Siemens

uHear, Unitron

Hearing Screener, Starkey

➤ ***Hearing Screening Apps***

Hearing Check (free; iOS)

Hearing Test/Hearing Test Pro (free/\$4.62; Android)

Jacoti Hearing Center (free; iOS)

Mimi Hearing Test (free; iOS)

ShoeBOX Audiometry Pro (free; iOS)

Test Your Hearing (free; Android)

➤ **Auditory Training**

Hear Coach

➤ **Measuring Noise Levels**

dB Meter Pro

***-Sound Level Meter***

Bosch iNVH (free; Android)

Decibel 10<sup>th</sup> (free; iOS)

Decibel Meter Pro (\$0.99; iOS)

Sound Meter (free; Android)

➤ **"LET ME HEAR AGAIN"** and is available **FREE**

➤ **Z4 Mobile** allows deaf and hard of hearing people to make and receive point-to-point calls to and from any videophone

➤ ***-Cochlear Implant Company Apps***

**1) Advanced Bionics (Sonova)**



AB Listening (free; iOS)  
AB Clix (free; iOS) - remote  
myNaida CI (free; iOS, Android)  
VocAB Scenes (free; iOS)

## **2) Cochlear**

Baha Control (free; Android) - remote  
Baha Support (free; iOS, Android)  
Hope Words LITE/HD (free; iOS) – listening practice for children  
Nucleus Support (free; iOS, Android)

## **3) Med-El**

Continents and Oceans (free; iOS)

### ➤ *Tinnitus*

Hear&Tinnitus (Lite/Pro) (free, \$2.99; iOS)  
WistFree/Tinnitus (\$1.99; iOS, Android)

### ➤ *-TV/Cinema/Theatre*

LoopFinder (free; iOS)  
Mobile Connect (free; iOS) – cinema/theater app  
TV Louder (free; iOS)

### ➤ *-Videomessaging*

Glide (free; iOS, Android)

## **Resource Articles and Webinar**

Medwetsky – Mobile Device Apps for People with Hearing Loss

[http://hearingloss.org/sites/default/files/docs/HLM\\_SeptOct2015\\_Medwetsky.pdf](http://hearingloss.org/sites/default/files/docs/HLM_SeptOct2015_Medwetsky.pdf)  
[http://hearingloss.org/sites/default/files/docs/HLM\\_NovDec2015\\_Medwetsky.pdf](http://hearingloss.org/sites/default/files/docs/HLM_NovDec2015_Medwetsky.pdf)

Hanavan – A Smart Phone Is a Hearing Assistive Technology

<http://www.hearingloss.org/sites/default/files/ASmartphoneIsaHearingAssistiveTechnology.pdf>  
<https://www.youtube.com/watch?v=BIcD2jJvm4s&feature=youtu.be>