# Android Applications for Communication – Spelling-based Communication

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**What is Android?**

Android is an open-source software stack for mobile devices that includes an operating system, middleware and key applications that is developed by Google and other members of the Open Handset Alliance, similar to what iOS is to Apple.

As Android is a software package that can run on a range of different devices instead of a device itself, a wide range of devices is available in the market with different features to suit individual users' needs. Android devices cannot run Apps designed for iOS devices, however, Apps designed specifically for Android devices can be downloaded or purchased from the Android Market operated by Google.

**Using Android devices for AAC**

As Android devices come in all shapes and forms, some devices may not be suitable for AAC purposes due to hardware limitations. Most Android AAC applications were able to run smoothly on devices that meet the following criteria.

- The device is running Android 2.1 or newer versions.

- The device has a 700MHz or faster processor

- The device has 256MB or more RAM

- The device has a screen resolution of 480x360 or higher

- The device allows the installation of third party applications

- The device can be connected to a speaker (via cable or Bluetooth)

Just like any Speech Generating Devices, the best practice approach is to trial a range of different devices to find out what is the best fit for the user before committing to a particular device. This is to make sure that the device is the best fit of the user's abilities, communication needs while allowing sufficient room to accommodate future growth in communication and language skills. With the wide range of speech generating devices/software/systems available, it is often difficult to select which one/s may best suit the needs of the specific individual. It is recommended that a Speech Pathologist with experience in AAC be consulted and that a trial of the technology take place. LifeTec offers consultations for individuals to trial a wide range of assistive technology.

For more information on different options on Speech Generating Devices, telephone, fax or e-mail your enquiry to obtain further information from one of the therapists about products. Alternatively, you can make an appointment to trial the equipment at our display centre or through our outreach service. Please phone LifeTec for further details.

**Text-to-speech Apps for Android**

As an alternative to iOS devices, there are a wide range of AAC apps available via Google's Android Market (although not as much as what you would see on the iTunes AppStore). For those who may have an Android device already or are looking for alternative options, following is a list of spelling based AAC apps available on the Android platform outlining their features.

| App | Droid Talker | Easy TTS | Speak It | Speak Manager | Speak! World | SVOX Text to Speech Engine | Talk – Text to Voice | Talk-a-Droid | TapTalker | Text to Speech Toy |
|---|---|---|---|---|---|---|---|---|---|---|
| Price | Free (ad supported version), USD $0.99 for ad-free version | Free | Free | Free | Free | USD $2.99 (per voice) | Free | Free (ad supported version), USD $0.99 for ad-free version with extra features | UK£1.99 | Free |
| Choice of keyboard layout | No | No | No | No | No | No | No | No | Yes, default Android onscreen keyboard or 2 hit large key onscreen keyboards (Normal, large text, high visibility) | No |
| Customizable message window and/or phrase list | No | No | Customizable font size | Customizable font size for message window and phrase list | No | No | No | No | Yes (Normal, large text, high visibility) | No |
| Word prediction** | Yes - with Gingerbread keyboard or Android 2.3 | Yes - with Gingerbread keyboard or Android 2.3 | Yes - with Gingerbread keyboard or Android 2.3 | Yes - with Gingerbread keyboard or Android 2.3 | Yes - with Gingerbread keyboard or Android 2.3 | Yes - with Gingerbread keyboard or Android 2.3 | Yes - with Gingerbread keyboard or Android 2.3 | Yes - with Gingerbread keyboard or Android 2.3 | Yes - with Gingerbread keyboard or Android 2.3  No - with 2 hit onscreen keyboard | Yes - with Gingerbread keyboard or Android 2.3 |
| Ability to save sentence / phrase | No | No | No | Yes | No | No | No | Yes (paid version), fixed phrase list on free version | Yes, phrases can be saved in categories for easy access | Yes |
| Messages can be edited in the message window | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| On-screen keyboard operation | Touch enter only | Touch enter only | Touch enter only | Touch enter only | Touch enter only | Touch enter only | Touch enter only | Touch enter only | Touch enter only | Touch enter only |
| Works in both portrait and landscape mode | Yes | Yes | Portrait mode only | Yes | Yes | Portrait mode only | Yes | Yes | Yes | Portrait mode only |
| Alternative access method available | Yes, with external keyboard and mouse alternatives# | Yes, with external keyboard and mouse alternatives# | Yes, with external keyboard and mouse alternatives# | Yes, with external keyboard and mouse alternatives# | Yes, with external keyboard and mouse alternatives# | Yes, with external keyboard and mouse alternatives# | Yes, with external keyboard and mouse alternatives# | Yes, with external keyboard and mouse alternatives# | Yes, with external keyboard and mouse alternatives# | Yes, with external keyboard and mouse alternatives# |
| Voice synthesizers | Android TTS Engine* | Easy TTS, Android TTS Engine | Android TTS Engine* | Android TTS Engine* | Android TTS Engine* | SVOX Mobile Voices, Android TTS Engine* | Android TTS Engine* | Android TTS Engine* | Android TTS Engine* | Android TTS Engine* |
| Speak sentence | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Word / Alphabet echoing | No | No | No | No | No | No | No | No | Key echoing when 2 hit keyboard is used | No |
| Remarks | | Low quality speech synthesizer, settings and uninstall menus above message window may be confusing to some users. | Speech output can also be used as reminder using the built-in timer feature. Speech output can be saved as an audio file for emailing. | Phrases / sentences can be saved in a list under the message window for quick access. | Multilingual support (US & UK English, Italian, German, French). | A range of high quality voices for Android devices. Purchased voices can also be used by other apps that use Android TTS Engine for speech output. | | Multilingual support (US & UK English, Italian, German, French). Paid version adds customizable phrase list and translation features | Optimized for larger devices with a large key 2 hit keyboard in a 6 cell layout. Key echoing can speak the content of the button that has been pressed when the 2 hit keyboard is used. High contrast theme is available. | Phrases / sentences can be stored in a list for quick access. |

Remarks:

- Alternative speech synthesizers can be used via Android TTS engine if installed.

** Word prediction is integrated into the on-screen keyboard from Android 2.3, for devices with older version operating systems, Gingerbread Keyboard (free app) can be used for word prediction purposes.

# Support of external keyboard and mouse alternatives may vary from device to device - a USB host port is required on the Android device for external keyboard and/or mouse options.