# **Tools & Technology for Accessible Reading**

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## Formats

DAISY (Digital Accessible Information SYstem): structure & navigation; bookmarkable; players remember where you left off. DAISY can be audio-only (usually human narration), text-only (take up less space because they don’t have audio, but requires text to speech – TTS – software for audio playback), or text+audio (almost always synthetic narration). DAISY books with text are full-text searchable. NNELS produces audio-only and text+audio DAISY books.

MP3: a very common audio format. DAISY books with audio include MP3 files which can play on MP3 players or can themselves be burned to audio or data CD. MP3 audiobooks can be burned to discs and will play in DAISY players.

E-text: in NNELS, e-text is usually RTF or DOCX. RTF opens with everything, but DOCX makes smaller file sizes and we use it when a book is complex or full of images. No audio is included with e-text, so files are often quite small and quick to download. E-text books include heading and navigation, and are full-text searchable. It is possible to customize font and layout settings with many readers & players (e.g. dyslexic fonts such as Open Dyslexic or Dyslexie).

EPUB: this is an e-text standard, but quite an accessible one. EPUB and DAISY standards are merging, with a view to helping publishers make digital books accessible from the point of publication. Publishers increasingly producing EPUB instead of more traditional but inaccessible PDF. EPUB books can be read with Adobe Digital Editions, Calibre, iBooks, or EPUB-reading plugins for web browsers.

## Tools

We encourage use of software and hardware that works with books from any source. If you’re using apps or software, pay attention to the company’s privacy practices.

### DAISY Players

* Audiobooks in MP3 format will work with all DAISY players.
* Burning a DAISY or MP3 CD: extract or unzip the downloaded book, select folder contents (not the folder itself), burn contents to CD as “data” file and it will fit on a single disc (up to 800 MB per CD). Burning as “music” or “audio” means 80 minutes per CD, but it will play on an older CD player.
* Older DAISY players work with DAISY 202 files, MP3, and several less-common audio formats. They usually do not have USB or SD card ports.
* Most newer DAISY players work with books in DAISY 2 & 3, MP3, e-text (including brf, docs, html, rtf, txt, xml, and a few others), and unprotected EPUB formats.
* For people with computers or newer DAISY players, USB sticks and SD cards are a very convenient way to deliver digital books and many books usually fit on a single stick or card. If possible, read the device’s manual first (manuals are almost all online) to see if special organizing or formatting is required. For example, the Victor Stream requires folder names beginning with $VR (e.g. $VRDTB for digital talking books and $VRText for e-text files). These can be formatted by the players, or manually from a Windows computer (clear instructions in the manuals!).
* Always transfer files/format for Victor players with a Windows computer.

### MP3 player

* NNELS frequently demonstrate playing MP3 audiobooks on a Sansa Clip+ with RockBox firmware (rockbox.org) purchased from talkingMP3players.com (they are very helpful people). These talking MP3 players “read” menu options out loud.
* Books in DAISY format always include MP3 files which can themselves be transferred to any MP3 player by copying and pasting.
* Don’t forget about podcasts. If 1-hour podcasts weighs about 50 MB, an 8 GB MP3 player can hold 160 hours of podcasts…there’s a podcast for everyone.

### VoiceDream

* This app for iOS and Android costs about $20 and works with books of almost all formats found in NNELS and with no size limits except space on the device. It can read e-text books out loud, and customization options include dyslexic fonts.
* Can also download books from Project Gutenberg and Librivox.
* To add NNELS as a source: tap “+”, tap “More”, scroll all the way down and tap “Add Web Site”, select NNELS, tap “Save” in top right-hand corner. Exit Content Sources, tap “+” and NNELS should be in the list. Check the “Remember me” box the first time you log into NNELS from the app and it will remember you.

### LibaryBox

* A portable router that can be pre-loaded with content that can then be broadcast over wifi to any devices within range
* Can preload with books, audiobooks, podcasts – also movies, handouts, anything – and bring that content to places that have limited or no internet connection.
* Any device with wifi can download from the LibraryBox.

### Free, open software for computers & laptops

* For a full list of recommended software for reading DAISY books, please see <http://www.daisy.org/tools/splayback>. There are free, open-source options for all operating systems.
* You can also use built-in audio players (iTunes, Winamp) to listen to MP3 files from MP3 or DAISY audiobooks.