

Selecting a dedicated eBook Reading Device

- **Popular Reading devices**

- Here is a great link that compares the most popular reading devices on the market at the moment. Side by side, you can select the device most suited to your needs and budget.

[http://wiki.mobileread.com/wiki/E-book Reader Matrix](http://wiki.mobileread.com/wiki/E-book_Reader_Matrix)

- **File Formats**

- Here is another link that explains the types of file format used by the most common eBook readers.
- This link also includes a matrix to see what file formats work on which device.

[http://wiki.mobileread.com/wiki/E-book formats#Supported Format Matrix](http://wiki.mobileread.com/wiki/E-book_formats#Supported_Format_Matrix)

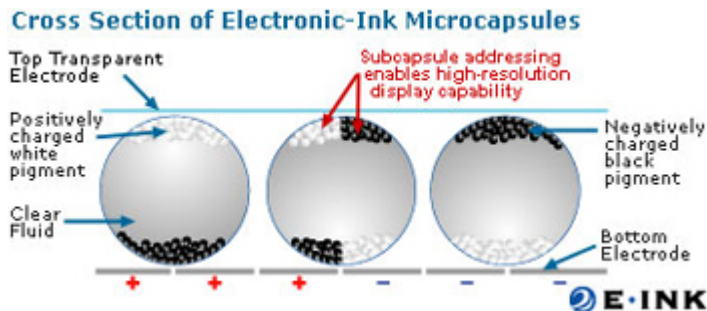
Explaining Technology and Terminology

- **eInk Technology.**

- <http://www.eink.com/>
- eInk is not back lit.
- eInk devices are not as harsh on your eyes as LCD displays.
- eInk devices cannot be read in the dark.
- eInk devices have no active lighting therefore draw less battery power and require less frequent charging than LCD displays.
- There is a few second delay between page turns (known as refresh rate).

Electronic ink is a proprietary material that is processed into a film for integration into electronic displays. Although revolutionary in concept, electronic ink is a straightforward fusion of chemistry, physics and electronics to create this new material. The principal components of electronic ink are millions of tiny microcapsules, about the diameter of a human hair. In one incarnation, each microcapsule contains positively charged white particles and negatively charged black particles suspended in a clear fluid. When a negative electric field is applied, the white particles move to the top of the microcapsule where they become visible to the user. This makes the surface appear white at that spot. At the same time, an opposite electric field pulls the black particles to the bottom of the microcapsules where they

are hidden. By reversing this process, the black particles appear at the top of the capsule, which now makes the surface appear dark at that spot.



NOTE: Image not drawn to scale - for illustration purposes only.

To form an E Ink electronic display, the ink is printed onto a sheet of plastic film that is laminated to a layer of circuitry. The circuitry forms a pattern of pixels that can then be controlled by a display driver. These microcapsules are suspended in a liquid "carrier medium" allowing them to be printed using existing screen printing processes onto virtually any surface, including glass, plastic, fabric and even paper. Ultimately electronic ink will permit most any surface to become a display, bringing information out of the confines of traditional devices and into the world around us.

- **LCD Technology**

- LCD is backlit so you can read it in the dark.
- LCD devices draw more battery power so require more frequent recharging.
- Most mobile phones and computer monitors use LCD.
- Over extended periods of use, LCD can cause eye strain.

- **Screen size**

- Most reading devices measure the screen diagonally (same as for TV)
- Touch screen devices allow you to highlight text, copy and paste text, turn pages using the touch screen and other nifty novelties.

- **Multimedia Cards**

- Many devices are fitted with removable multimedia card slots. This means that you can expand the memory of the device and fit more books in your library.
- Reading from memory card may slow your refresh rate down slightly.
- Normal SD cards only go up to 2GB, whereas HD SD cards currently go up to 16GB. I have a 2GB SD card in all my devices and this fits over 700 eBooks with ease.

- **Connectivity**

- Most devices come with USB cables to connect to your computer for synchronising your device and downloading files. I have found this to be the easiest method of transfer.
- Some devices come with Bluetooth technology which can be 'paired' to your computer to download files wirelessly.
- Some devices come with WiFi 802.11b technology, which means the device, can theoretically connect to the internet. Be aware that you cannot 'surf' the internet on many eReading devices so check manufacturer's web sites.
- **PDA** devices with WiFi 802.11b can usually be used to surf the internet, send and receive emails and download books directly from the internet.

- **PDA devices**

- **A personal digital assistant (PDA)** is a [handheld computer](#), also known as **small** or **palmtop computers**.
- Newer PDAs also have both color screens and audio capabilities, enabling them to be used as [mobile phones \(smartphones\)](#), [web browsers](#), or [portable media players](#).
- Many PDAs can access the [Internet](#), [intranets](#) or [extranets](#) via [Wi-Fi](#), or [Wireless Wide-Area Networks \(WWANs\)](#).
- Many PDAs employ [touch screen](#) technology.
- Currently, a typical PDA has a touch screen for entering data, a memory card slot for data storage and at least one of the following for connectivity: IrDA, Bluetooth and/or WiFi.
- However, many PDAs (typically those used primarily as telephones) may not have a touch screen, using softkeys, a directional pad and either the numeric keypad or a thumb keyboard for input.
- Some PDA's have multimedia cards to expand storage capacity. Check manufacturer's web sites for specific details.
- PDA screens are generally smaller with the largest being 4" (I have a 4" screen on my HP IPAQ Enterprise 210/212 and am not aware of any bigger ones).
- **PDA Operating Systems** The currently major PDA [operating systems](#) are:

- [Palm OS](#) - owned by [PalmSource](#)
- [Windows Mobile](#) Professional and Classic for use on [Pocket PCs](#), (based on the [Windows CE](#) kernel) - owned by [Microsoft](#)
- [iPhone OS](#) - owned by [Apple Inc.](#)
- [BlackBerry OS](#) - owned by [Research In Motion](#)
- Many operating systems based on the [Linux](#) kernel - [free](#) (not owned by any company) These include
 - [Familiar](#) (comes in three flavours: [GPE](#), [Opie](#) and barebone)
 - [OpenZaurus](#) (for [Zaurus PDAs](#))
 - [Ångström](#), a descendent of OpenZaurus
 - Intimate (for PDAs with an exceedingly large amount of memory)
- [Symbian OS](#) (formerly [EPOC](#)) owned by [Motorola](#), [Panasonic](#), [Nokia](#), [Samsung](#), [Siemens](#) and [Sony Ericsson](#)

Choosing the right Software to read eBooks on your PDA.

- I have found that MobiPocket is the best e reader software to download (free) to your PDA or mobile Phone. It comes with heaps of features, can be customised, and is simple to use.
- Many PDA's and Phones can read PDF using clearvu PDF or similar software.
- Check manufacturer's specifications for other PDA/Phone software.