



***E Ink - color electronic paper displays for eBooks, eTextbooks, advertising, in-store signage, information displays, mobile applications, and more!***



## ***Just Like Paper, Only Better***

With over 150 issued patents, E Ink's ePaper technology creates an image that looks like real printed paper from all angles and lighting conditions. But unlike printed paper, E Ink displays are dynamic and can update their image on demand to enable a wide range of new products. With the advantage of being readable under direct sunlight, product designers are using E Ink's technology today in products including mobile devices, cell phones, memory indicators, and electronic signage.

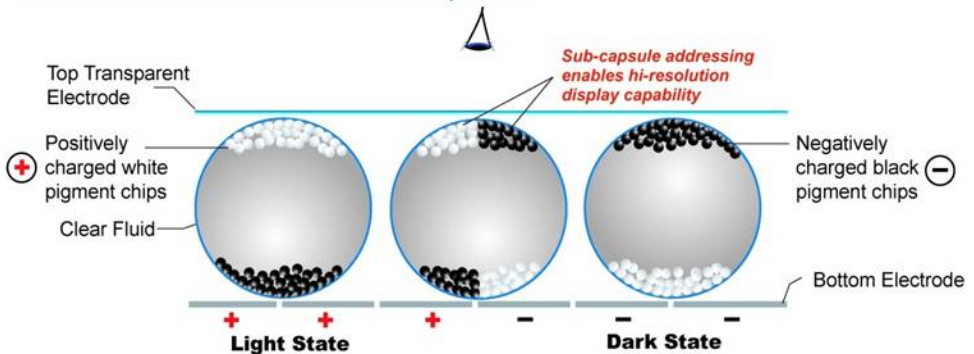
Product designers working with E Ink technology find it very flexible. The display uses a fraction of the energy of a standard liquid crystal display (LCD), so fewer batteries are required, the device weight is lowered, and use time is extended. Touch-compatible E Ink technology enables pen or finger input which enhances the user-experience. By leveraging E Ink's manufacturing expertise and supply chain, manufacturers have been able to ship millions of devices utilizing E Ink technology to consumers.

By reducing the need for paper, E Ink technology is saving trees and lessening the environmental effects of papermaking and printing process. And, because the technology is downloaded from a PC or wirelessly, the transportation costs and pollution associated with shipping books or delivering newspapers is also eliminated. Compared to PDAs, laptops, and tablets, eBooks require a fraction of the energy to display information. A single battery charge can give you up to a month of reading. Using a sustainable technology like E Ink is easy on the eyes and environment.

## How Does E Ink Work?

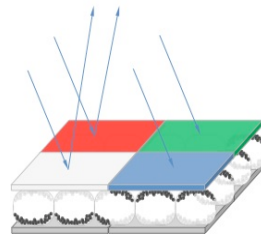
E Ink is short for “electrophoretic ink”. Technically speaking, charged pigments suspended in a clear liquid micro-capsule respond to a voltage that moves black or white pigments to the screen’s foreground. The technology differs from traditional displays because electrophoretic displays reflect light, rather than emitting it. Computer displays and mobile phone screens rely on a backlight to illuminate pixels of different colors, while E Ink technology leverages ambient light just like ink on paper. With E Ink’s patented and proven bi-stable technology, images and text will remain on the screen even without power.

### Cross-Section of Electronic-Ink Microcapsules



### E Ink Triton Color Imaging Film

With the E Ink Triton color configuration, a thin transparent colored filter array (CFA) is added in front of the black and white display. Now the display can also reflect color. The CFA consists of four sub-pixels – red, green, blue, and white – that are combined to create a full-color pixel. The result? A low-power, direct-sunlight, readable color ePaper display that is mass manufactured in a practical way.



**Color filter overlay paired to E Ink Triton Imaging Film**

### Did you know?

- There are over 50 models of eBooks using E Ink technology
- The battery life in E Ink devices are measured in weeks, not hours
- One out of 10 people in the United States owns an eBook
- E Ink’s technology is based on research originally conducted MIT’s Media Labs

# ***E Ink Color Applications***

E Ink continues to revolutionize the ePaper market with E Ink Triton imaging film. In addition to 16-levels of grayscale, Triton is capable of displaying thousands of colors to enhance the ePaper viewing experience. Whether turning a page, taking notes, or viewing an animation, Triton delivers the functionality to satisfy designers and consumers alike. Here are some ways the E Ink color technology is being used today:

**eBooks** – the E Ink display reads like a printed page with color illustrations and photos incorporated into the text. The digital typeface can be resized based on how you want to view it. Because E Ink's ePaper uses ambient light to reflect off the screen, the display offers an "easy on the eyes" reading experience under all lighting conditions whether you are at the beach, in the classroom, or your living room.

**eTextbooks** – imagine updating textbooks from your PC or Mac with the latest curriculum, charts, maps, and illustrations. Now you can. Product designers are using E Ink's technology to design eTextbooks with digital color highlighters for marking important ideas, taking notes, and integrating with coursework -- like tests and quizzes. eTextbooks are just like your familiar printed textbooks, but without the extra weight in your backpack or space taken up on your shelf.

**eNewspapers and eMagazines** - designed specifically with print readers in mind, new devices utilizing E Ink technology feature large screens and wireless downloads of the latest information. With E Ink technology you can now see comics, advertisements, and photos in color from the publications you depend on the most.

**Electronic Signage** – wide viewing angle signage using E Ink's Triton technology is eye catching. Triton offers a dynamic alternative to traditional print signage. Adding color to emphasize important message points is quick and easy. E Ink also offers Ink-In-Motion™, a flashing electronic display that combines the proven promotional effectiveness of motion with the visual appeal of ink-on-paper. Ideal for retail environments, displays developed with Ink-in-Motion use no backlight or frontlight and can be easily viewed under virtually any lighting condition. A typical postcard-sized display can run on two AA batteries for up to six months.

## **About E Ink**

E Ink is the world's leading supplier of Electronic Paper Displays (EPD). E Ink's technology is ideal for many consumer and industrial applications spanning handheld devices, eBooks, PC accessories, watches, clocks, and public information displays and promotional signs. More information can be found on E Ink at [www.eink.com](http://www.eink.com)



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