

At CES: Color-changing E Ink film for display experience

January 7 2015, by Nancy Owano



Architects and designers create "experiences" and use the visual language of display through materials, colors, shapes and light. Their goals, though, are often limited in what they can achieve as the architectural elements are static; any desired change takes new materials and more labor. Breakthroughs in lighting and digital displays have brought about color and design changing but E Ink on Tuesday announced yet another pathway to color-changing design, called E Ink Prism.

The title of their press release was "E Ink Technology Transforms Building Architecture Products to Create Dynamically Changing Environments." The company said that E Ink Prism uses E Ink's bistable [ink](#) technology in a film that can transform architectural materials into dynamic designs. "It is visually similar to paint because it uses the same pigments found in the printing industry," said the company. The E Ink advantage lets buildings change colors and patterns on the spot, said *Engadget*, "without having to rely on banks of expensive digital [displays](#) ." What does E Ink mean by "bistable"? According to the company, "Bistable means that the [image](#) on an E Ink screen will be retained even when all power sources are removed. In practice, this means that the display is consuming power only when something is changing."

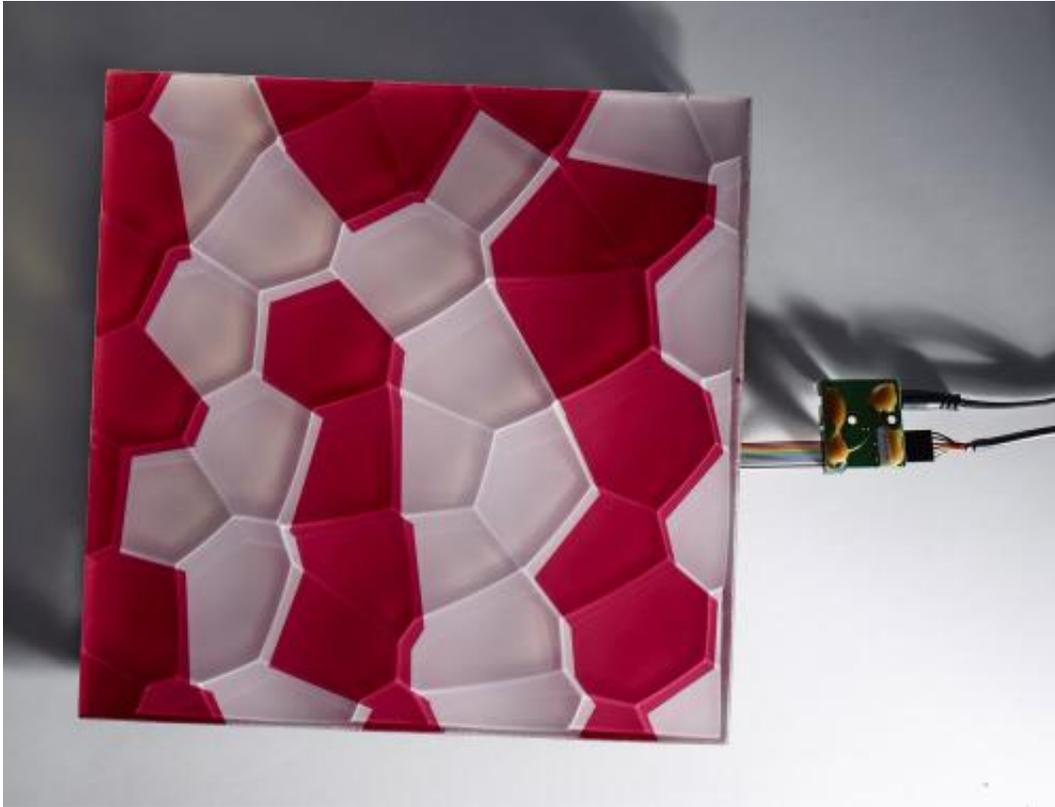
Writing in *Gizmodo*, Andrew Liszewski said, "it sounds like a neat [advancement](#) of a technology that many thought would be killed off by tablets, but has managed to find endless ways to stay technologically relevant."



A demonstration of products made possible with Prism was on hand at the CES show in Las Vegas. The company showed a wall display of changing colors and also a glass table, with its tabletop changing color, using ambient light. Brad Linder of *Liliputing* talked to E Ink's Giovanni Mancini, about the company's technology for color-changing displays, for such applications as public spaces like airports and [large](#) office complexes.

According to a report about Prism in *The Wall Street Journal*, Mancini compared the applications to paint. When decorating a wall the old-fashioned way, he said, people choose their colors, apply the paint and the effect remains static for a long time. With Prism, the colors can change at random, via conscious programming or external stimuli. "What E Ink is [doing](#) is taking pigments and controlling those pigments," Mancini said.

With this [electronic ink technology](#), color changes and architects and designers can integrate various materials with changeable colors and patterns. One such result might be animated textured walls, where animated paint is unleashed to hold visitors' attention. Patterns as well as colors can be programmed.



Is Prism available now for businesses? Mancini said Prism as shown was a prototype. He said the company was working with partners in businesses to incorporate the company's technology into their products.

The company site pointed out that "Programmable patterns and shapes can be integrated to create designs or function. Doors can indicate if a conference room is occupied, wall designs can respond to noise, temperature, or motion in the room. Whatever the idea, the opportunities are endless and only limited by a designer's imagination."

Would Prism be a power hog? An advantage promoted by the [company](#) is its "[low power consumption](#) and industry-leading energy efficiency,"

which it said significantly reduces the need for electrical connections.

More information: eink.com/ces2015/

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