

DAZZLE

Frequently Asked Questions

What is *DAZZLE*?

DAZZLE is an original, permanent public artwork commissioned by San Diego County Regional Airport Authority (Airport Authority) for San Diego International Airport's Rental Car Center. Artist team Ueberall International conceived of an iconic, site-specific artwork design that responds to the unique faceted façade and brings the structure to life. The artwork features more than 2,000 tiles of a revolutionary material similar to the technology found in handheld e-readers, but adapted for an architectural scale. It is inspired by a military technique used here in San Diego called "razzle dazzle" camouflage. The artwork features custom, dynamic animations created by Ueberall that are displayed across the façade of the Rental Car Center.

How was the idea conceived?

After exploring different artistic strategies for achieving a major visual impact, the artist team decided to apply dazzle camouflage to the gigantic façade. They were inspired by the historic form of ship camouflage which hides objects in plain sight by visually scrambling their shapes and outlines. This phenomenon is seen in nature with zebras and some wild cats. The artist team experimented with different ways to execute a geometric camouflage pattern. The breakthrough came with the idea of applying e-paper technology to the façade, turning it into a gigantic canvas for dynamic pixel animations.

The e-paper tiles are articulated in a parallelogram shape and arranged in algorithmic distances to each other, to create an overall dynamic visual effect, even when the pixels are still. The graphic patterns are animated by a library of short loops evoking water ripples, moving traffic, dancing snowflakes to shifting geometries.

How does it work?

The physical components of *DAZZLE* include 2,100 autonomous E Ink Prism™ tiles, strategically placed wireless transmitters, and a host computer. Each tile is integrated with a photovoltaic solar cell for power, electronics for operation, and wireless communication to create each unique animation developed by the artists. Each tile has its own unique address to enable precise programming of countless visual patterns. The host computer stores and coordinates all of the animation programming for the tiles. Information is then transmitted from the host computer through Ethernet wires to wireless transmitters that face the building. The wireless transmitters forward the information to clusters of tiles which further forward data to other tiles. Each tile will individually transition from black to white based on the instructions it receives. The host computer will coordinate the activity of each tile.

Who created *DAZZLE*?

Artist team Ueberall International (Nikolaus Hafermaas, David Delgado, Dan Goods, and Jeano Erforth) were selected by the Airport Authority to create an original, integrated artwork specifically for the Rental Car Center. Ueberall partnered with E Ink to develop a unique application of their e-paper technology in order to realize the project.

How was Ueberall selected for this opportunity?

The Airport Authority conducted a highly competitive, open artist selection process to identify the most qualified artist or artist team for the Rental Car Center Public Art Opportunity. Ueberall was recommended by an ad hoc selection panel of art and design professionals from a pool of applicants, based on their qualifications and past work. This recommendation was then reviewed and approved by the Airport Authority's standing Art Advisory Committee.

What is E Ink and Prism?

E Ink is the world's leading innovator of electronic paper technology. The company delivers its advanced products to the world's most influential brands and manufacturers, enabling them to install extremely durable, low power displays in previously impossible or unimaginable applications and environments. Products including eReaders, electronic shelf labels, digital signage, and architectural materials are at the forefront of their market due to the unique benefits of E Ink technology. Prism is an E Ink product line specifically designed for the architecture and design market. *DAZZLE* is the first major installation of such magnitude to use Prism film.

Will it display information or images like an eReader?

The artwork will consist of a range of abstract, graphic patterns animated across the 2,100 tiles. It will not display text or representational imagery.

DAZZLE is designed to coordinate the operation of 2,100 individual tiles made from E Ink Prism and create countless pattern variations for a one-of-a-kind visual impact. While Prism uses the same core technology that is in eReaders, each tile has been integrated differently to act as an individual pixel or dot within a larger artwork as is being done with the façade of the Rental Car Center.

What is the power consumption?

Each tile is equipped with its own integrated solar cell which eliminates the need for wires or external power connections. Due to the inherent low power characteristics of E ink technology the art piece alone consumes a similar amount of power as a PC computer. Including all support hardware (PC, communication transmitters, etc.) with the 2,100 tiles, the overall consumption is less than two flat panel TVs.

Does it light up?

Unlike other technologies for displays and experiential designs, E ink does not emit light but actually has a matte appearance, like paper. This is because like ink, E Ink uses pigments creating a similar appearance to traditional paint-like or paper surfaces.

Will it work at night?

DAZZLE is designed to create an optimal daytime experience when the audience is largest. The artwork will have periodic visual activity into the evening hours, but will operate consistently while daylight is present. The artists have created static graphic designs, or tableaux, that are displayed on the façade when animations are not activated or less visible during the evening.

Can you modify the animations for holidays, special events, etc.?

The original animations created by Ueberall may be updated with the artist's collaboration, but solely content created by the artist will be displayed.

What was the budget for this project?

\$875,000

How is public art funded at the Airport?

Public Art at San Diego International Airport is funded through a 2% allocation of eligible construction costs.