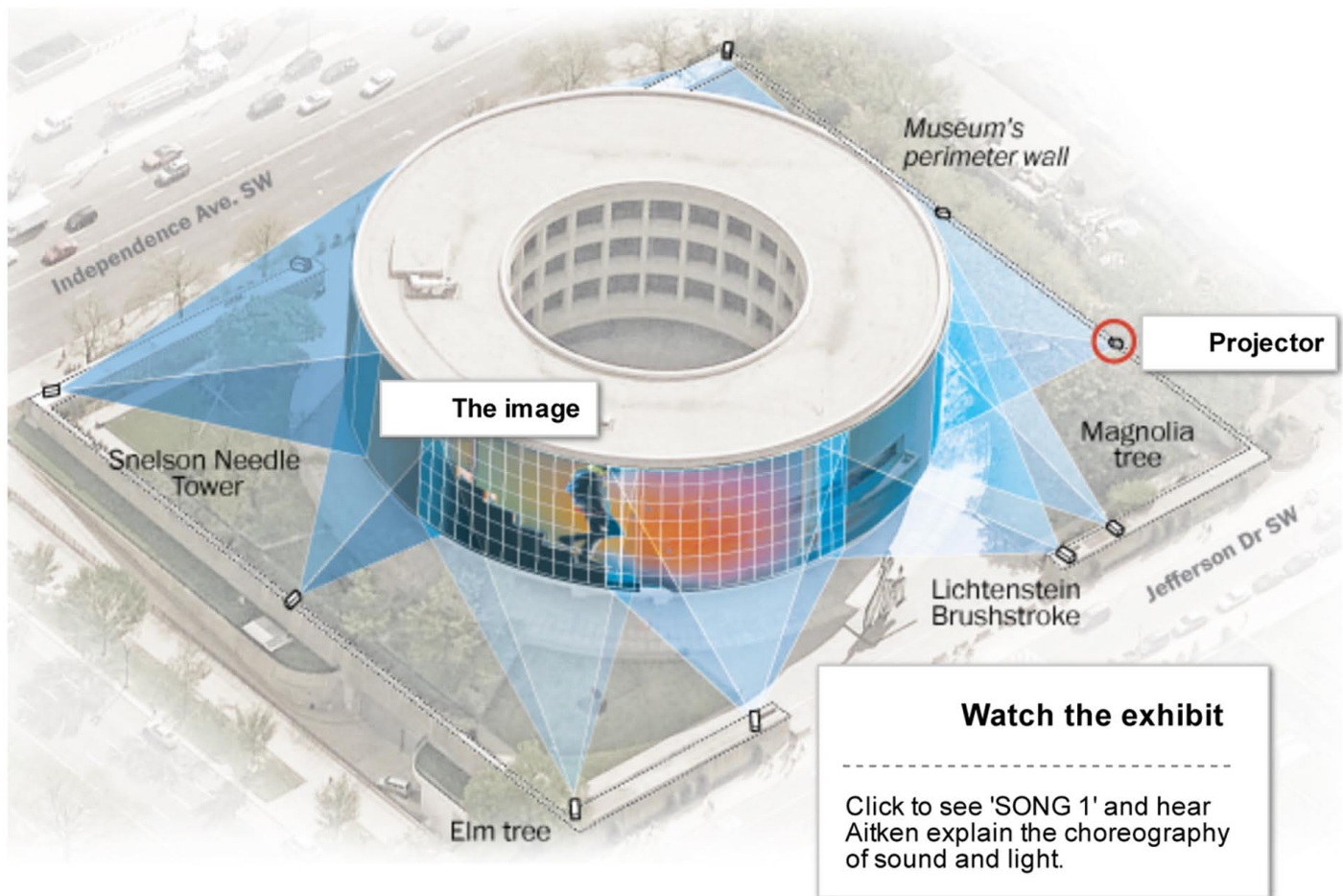


"Thinking Outside the Circle: Exploring the Hirshhorn's 'SONG 1' exhibit". The Washington Post (3/23/12)

The Washington Post

Exploring the Hirshhorn's "SONG 1" exhibit

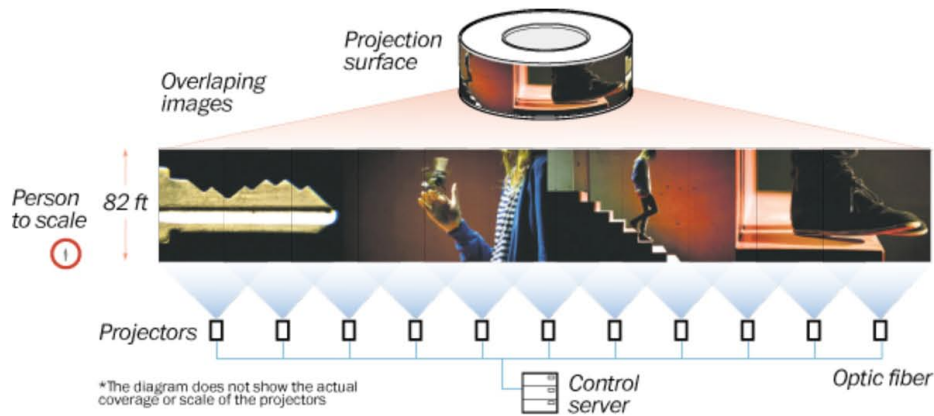
Doug Aitken's latest piece cascades across the Hirshhorn Museum's 82-foot tall and 725-foot wide circumference, as the "first-ever work of 360-degree convex-screen cinema" of this scale. To make it all happen, trees were trimmed, street lights got anti-glare covers, and the Federal Aviation Administration was consulted to make sure the exhibit wouldn't disrupt aircraft landings. But the work didn't stop there:



Splitting the image

Laid out flat, "SONG 1" is a moving image 13,444 pixels wide. To create a 360-degree display, a computer program cut the image into eleven, overlapping sections, one for each projector. A total 41,500 feet of fiber-optic cables then carry those images from four server computers in the Hirshhorn's basement to the projectors mounted on the perimeter wall.

303 GALLERY



Avoiding obstacles

Giving eleven projectors each a clear shot of the Hirshhorn meant avoiding the museum's many trees and two large outside sculptures: the Snelson Needle Tower and the Lichtenstein Brushstroke, and it came at a cost. Projectors must be at different angles, and cannot be equidistant from each other. So even after all the computer calculations, the final images were mapped using a grid, and a programmer manually matched overlapping sections, block-by-block.



Projectors

Eleven 160-pound digital projectors power the exhibit. Each has a brightness of 20,000 lumens. Most normal office projectors go up to 3,000 lumens.

Enclosures

Weather-proof enclosures protect the projectors. They are equipped with heaters that are triggered when temperatures drop to 40 degrees. Eight high-velocity fans run in concert with the projectors, and circulate large volumes of air throughout the unit to prevent overheating.

SOURCE: Ai Masino, director of exhibitions, Hirshhorn; [Hirshhorn Museum and Sculpture Garden](#); Christie Digital.
VIDEO: Ben de la Cruz - The Washington Post. GRAPHIC: Alberto Cuadra and Sisi Wei - The Washington Post. Published March 22, 2012.

PHOTOS



Artist Doug Aiken's "SONG 1" transforms the modernist museum into "world's greatest screen."

Related headlines

[Hirshhorn Museum's "Song 1" is all about projection](#)

[Hirshhorn's "Suprasensorial" exhibit lets viewers participate in the art](#)

[Online radio as art](#)

[D.C.'s Rothkos](#)

[Ai Weiwei work coming to Sackler Gallery](#)

[Best art and architecture of 2011](#)

[The art of diplomacy](#)

[A protest camp reimagines the city](#)

[Washington art collectors focus on the conceptual](#)