High-tech team's mile-wide timepiece to be world's largest

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Jim Bowers is playing with time during this year's sold-out Burning Man festival in the Nevada desert.

The ambitious artist is a 14-year veteran of the festival and is well known for unveiling awe-inspiring projects: His "Eyes of Gawd" in 2010 displayed a 40-foot carbon wire frame with giant animated eyes.

This year, he will thrill his fellow "Burners" with a hybrid creation combining art and technological know-how into what is planned as the world's largest working clock - a mile-wide piece that will mark the time by emitting lasers across the Nevada desert. "The 'Burning Time' project was an idea I had about three years ago but just didn't act on it," Bowers said. "At the time, I thought it wasn't art enough. It was too techie for me."

Bowers and his team of artists, scientists and craftsmen are putting the finishing touches on the clock. When finally constructed Aug. 29, it will be world's largest functioning timepiece, according to categories within the Guinness World Records.

After learning of this year's Burning Man theme, "Rites of Passage," Bowers said the clock design began to come back together. He began brainstorming ideas of how to turn the festival into a giant clock and being "the first artist to do it."

The laser-driven clock will possess a circumference of 3.25 miles, a

diameter larger than 1 mile and be accurate up to one-2,000th of a second. It will keep time throughout the eight-day event with a second, minute and hour hand. The clock's hands will extend 40 feet above the heads of festival participants from a tower located in the center of the festival.

The clock will fill the inner playa area of the festival grounds in Black Rock City, Nev. Twelve towers, each 22 feet tall, will mark the hours on the face of the clock.

For Bowers, the project is much more than realizing a 3-year-old dream. It's about working with other ambitious people and turning an intangible concept into a tangible reality.

"I'm a collaborative artist. I really enjoy working with other people," said Bowers, who lives in the Sacramento area.

"I hand-picked 67 artists to work on the towers, which will be set up around the site, and I had to find the experts in their fields who would help me put this together."

One of the experts helping build the clock is Marc Hertlein, a scientist from the Lawrence Berkeley Laboratory. Hertlein and two of his fellow laboratory scientists - Russell Wilcox and Tim Black - are helping program the clock's powerful lasers and build the mechanics of the clock's centerpiece.

"We had to create everything from scratch," Hertlein said. "Basically, we had to do the complete design."

Hertlein volunteered for the assignment after already having plans to attend the festival. "This isn't the first project I've worked on for Burning Man," Hertlein said. "All the projects are different, but this one

was unique because of the scale."