

This is an ambitious project of Delhi Sikh Gurdwara Management Committee being implemented through Sun Foundation. The idea behind the formation of 'Sri Guru Tegh Bahadur Holographic Auditorium and International Centre for Sikh Studies' is to propagate the life, philosophy, and teachings of Sikh Guru Sahiban and showcase the unique martyrdom of Ninth Guru Sri Guru Tegh Bahadur Ji and sacrifices made by tenth Nanak Sri Guru Gobind Singh Ji. Optoma and MSS World take the opportunity to integrate the venue with cutting-edge AV solutions.

Dome Holographic Presentation on History of Sikh Gurus and Martyrdom of Guru Tegh Bahadur Sahib



INTEGRATING PROJECTION AND HOLOGRAPHY

The International Centre for Sikh Studies wanted to create a 45-minute audiovisual show that knits the long history of Sikhism from its inception to today with the latest projection technology. This full 360° dome projection covers an auditorium that is 18 meters in diameter and 10 meters in height, equipped with 200 seats. The auditorium projection is an immersive viewing experience that aims to create awe-inspiring and emotion-inducing memories.

The building construction was completed in 2018, but due to the complex nature of this immersive dome projection, no other brands were willing to take on

the AV installation component. This is when **Optoma** and **MSS World** stepped in and took the opportunity head-on.

Solutions:

During the planning phase, the project's complexity evolved with adding a 6 meters diameter and 2 meters height holographic solution along with the 360° dome projection. Despite challenges with an inflexible projection area and the limitations of projector distances, all projection and holographic content



Creating awe-inspiring and emotion-inducing environment with 360° dome projection

needed to be integrated.

Throughout 2022, Optoma India and MSS World worked closely with the International Centre for Sikh Studies to create the massive dome and holographic screens.

This project is the largest installation project in India for Optoma yet. The Optoma India team provided the client and their vendors with hands-on experiences with model preselection.

5 units of ZU1050 and 5 units of ZU750 were chosen and used with A01 Short throw lenses. Both projector models are one of the most versatile ones in the industry, with 6 interchangeable lenses to adjust to different installation needs. The models were equipped with MultiColor Laser technology, which defines outstanding balance in accurate color reproduction and exceptional brightness, making no trade-off between brightness and color. ZU1050 and ZU750's 10,000 and 7500 ANSI lumen brightness matched the color temperature and created a bright and immersive projected video and holographic imagery.

Results:

The 'Sri Guru Tegh Bahadur Holographic Auditorium' was designed so the audience can enjoy 360° of surround sound. The auditorium's dome is the finest screen to project an immersive dome-based video display environment.

In the auditorium's center is the holographic display, which utilizes light diffraction to create virtual three-dimensional imagery. With digital overlay and holographic display technology, the brain is tricked by the illusion of a real object or environment.

The Widescreen Ultra eXtended Graphics Array (WUXGA) content is to run seamlessly on dome projection and holographic display. It creates a story and an immersive field experience for 200 viewers no matter where they are seated.

The immersive projection and holographic experience are filled with real-time interactive components and pre-rendered linear computer animations and graphics, combining numerous influences. The viewers enjoy visual and audio experience mixed with art, a well-knitted history of Sikhism, and technological roots in domed architecture.

Professor Rawail Singh, Secretary General of the International Centre for Sikh Studies, commenting on the success of the installation, stated, "This is a team effort, where Optoma has a huge role in the equipment, which plays our content. I watched it daily, and yet, I feel like watching more. Such is the greatness of our Guru's life philosophy, coming through production and machinery. Everything is marvellous!"

Inventory List

- 5 units of ZU1050
- 5 units of ZU750
- 10 units of A01 short throw lens

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