

AV CONSULTANT: 3D SHAMLAJI PROJECTION

*Shamlaji Vishnu Mandir or Shamlaji Temple – a Hindu temple located in Shamlaji, in the Aravalli district, dedicated to the deity Vishnu, now experiences an applaudable laser light and sound design, showcasing the brilliance of 3D projection mapping in the country. The venue, illuminated by AV consultant, Rhino Engineers and accomplished by systems integrators, Star Dimensions India, leaves the visitors stunned with astounding projections. Content provider, Magical Theatre delivered impressive show content, allowing the three prominent immersive storytellers to accomplish the latest AV project. **Narendra Naidu** (CMD) – Rhino Engineers Private Limited, Ahmedabad – Gujarat (India), gets in touch with the AV-ICN Expo Magazine team to share insights on the projection mapping and the team's commitment to deliver the visual brilliance.*

AV Consultants, Rhino Engineers delivered RGBW dynamic lighting in synchronization with the content covering development, design, and implementation of the 3D Projection Mapping at Shamlaji Temple

RHINO ENGINEERS WRAPS

SHAMLAJI TEMPLE WITH BREATHTAKING 3D PROJECTIONS

The Pilgrimage Centre Experiences AV Spectacle with Eminent AV Consultant and Systems Integrator on the Clock

Standing tall with the rich cultural significance in the country, Shamlaji Mandir is one of the most holy temples of Lord Vishnu. Rhino Engineers

Private Limited, one of the leading pro AV consultants in India, captivated the attention of the visitors at the temple with innovative façade lightings as the

project consultant. The team's major responsibilities included concept development, design, and coordination for RGBW dynamic lighting in synchronization with



The site has been integrated with 7.1 surround sound system and projection system to provide an immersive experience to the audience

content and concept are centred around the Shamlaji Temple is created based on the temple's history, architecture, and the mythical stories associated with it.

The pilgrimage centre is therefore, equipped with visually appealing 3D projections under a 28-minute vibrant show, featuring the narration by **Harish Bhimani** and music by the band, **Indian Ocean**. Presented in three languages – Gujarati, Hindi, and English, the show narrates a rich history that is unfamiliar to many people. Audio system has been designed with 7.1 surround sound to provide an immersive experience for the audience. Additionally, the entire show runs on environmentally friendly and green energy-based power systems, resulting in zero electricity costs for the client.

the content. The team also worked on the 7.1 audio system, projection system, and solar power installations.

Additionally, Rhino Engineers also served as the project management consultants for the project. The successfully achieved project involved supply, installation, commissioning, operation, and maintenance of Shree Shamlaji Vishnu Mandir for five years of the 3D projection mapping system on a turnkey basis. Project owner, **Gujarat Pavitra Yatradham Vikas Board**, Government of Gujarat, Gandhinagar briefed the Rhino Engineers' team on the project for visitors to experience stunning visuals at the historical site.

Star Dimensions India aligned their roles as the systems integrators along with **Magical Theatre** as the content provider to deliver remarkable visuals to the laser light and sound showcase. The video

INVENTORY LIST:

- Barco's 3 chip DLP, laser video projector 22000 Lumens – 5 Nos.
- Kwant's laser light projection solution (beam size 3x3 mm) – 2 Nos.
- Barco's media, production, master show controller server – 1 No.
- Dataton's 3D projection mapping software, playback control system – 1 No.
- Turbosound audio system 7.1 surround sound with Dolby system – 1 Set
- Claypaky's 440 W Moving Head Lights – 1 Set
- ABPL 200W RGBW LED Light Fixture – 40 Nos.
- ABPL 100W RGBW LED Light Fixture – 15 Nos.
- ABPL 24-WATT WW LED Linear Wall Wash 50W – 200 Nos.
- ABPL 20W RGBW LED Light Fixture – Wall Washer – 130 Nos.
- ABPL 14W RGBW LED Light Fixture – Wall Washer – 48 Nos.
- ABPL 12-WATT WW Linear luminaire suitable for facade Lighting – 450 Nos.
- ABPL 700-900 lm/mtr dot free LED flexible linear light – 600 m.
- ABPL 200W LED light for illuminated for general lighting – 4 Nos.
- ABPL DMX controller system with standalone interfaces – 2 Nos.



The entire show ran on environmentally friendly and green energy-based power systems, resulting in zero electricity costs for the client

CHALLENGES AND SOLUTIONS

Large venue projects require attention to details and a careful approach towards every minor detail. Keeping the intricacy in mind, the consultants examined every projection challenge cautiously and chose a remarkable solution that eventually caught the eyes of the visitors.

CHALLENGES FACED FROM THE DESIGN CONSULTANCY PERSPECTIVE:

Designing the projection façade and viewing gallery posed significant challenges. Selecting an appropriate location for the viewing gallery was difficult due to

Date of Commencement 23 July 2023
Date of Commissioning: 30th July 2024
AV Project Cost: Rs. 6,48,90,000/-
Project Launch Date: 25th November 2024
Inaugurated by: Hon'ble Tourism Minister of Gujarat State
Systems Integrators: Star Dimensions India
AV Consultants: Rhino Engineers Private Limited
Content Providers: Magical Theatre

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the site conditions. The temple has four entry gates with constant pilgrim movement, so Rhino Engineers' team opted for a back right-angle area. The team then selected a projection façade area that covers a quarter of the temple's surface.

made from a container, was installed on the rooftop of the rampart to house five projectors, UPS, and audio/video hardware and software, protecting them from climatic factors like dust, heat, and rain.

CHALLENGES FACED FROM THE INTEGRATION ASPECT:

Integrating lighting and audio systems was another major challenge. As pilgrims move all around the temple area during parikrama, the team had to design light fixtures close to the base of the structure. The Front-of-House and base speakers were installed near the edge of the temple podium, while the surround speakers were placed on the rampart, forming 90-degree L-shapes. An air-conditioned control cabin,

CHALLENGES FACED FROM LOCATIONAL, STRUCTURAL, AND LOGISTICAL PERSPECTIVES:

Installing electrical wiring and light fixtures was difficult due to the temple's historical structure. The team used special mounting arrangements and created stone-based housings for speakers to protect them from the public. As the site is around 140 km away, taking about 2 hours and 30 minutes to reach, most materials

were shipped to Ahmedabad and then transported to Shamlaji by road.

CONCLUSION

Integrating a spectacular combination of projection mapping and RGB dynamic lighting synchronization on one of the finest pilgrimage sites, the project accomplished a first-of-its-kind. The ancient temple architecture now showcases a refreshingly amazing 3D projection under a large surface area of 90ft x 85ft.