

Relay Nissan's concept for the future of mobility through video staging on a grand scale



NISSAN PAVILION

Nissan Motor Co., Ltd.

Installed system: Projection Mapping

Date of installation: July 2020
Location: Kanto area

Challenge:

- Staging of impressive videos to relay Nissan Motor's concept for the future of mobility

Solutions:

- Utilize high brightness laser projectors for convincing high definition video
- Utilize ultra-short-throw lens projectors to allow for flexibility of installation

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We are satisfied with this exhilarating and inspirational staging of the concept for Nissan Motor which has reached a new stage in its evolution.

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Nissan Motor Co., Ltd.
Global Brand Experience Department
Nissan Pavilion Director
Keita Matsui

*Affiliation as of July 2020.

Background of System Installation

A facility to relay Nissan's concept for a future mobility society

In August 2020, Nissan Motor Co., Ltd. opened the entertainment facility "Nissan Pavilion" where visitors can interactively experience a future mobility society. It was conceived as a hub, not simply to display Nissan automobiles, but to communicate Nissan's latest technology through various interactive displays to a wide range of customers - such as its electric vehicles (EV) and autonomous driving support technology. Keita Matsui, Director of Nissan Pavilion remarked, "our aim was to create a town where electric vehicles play a key role and where families and even customers who are not interested in cars can come and enjoy themselves."

Reasons for System Installation

Showcasing Nissan's Technological Capabilities Through Diverse Content

An important goal of this facility is to have visitors experience for themselves Nissan's technology and initiatives. They include a display for the new crossover EV "Nissan ARIYA," "Invisible to Visible (I2V)" technology that enables the user to visualize what is invisible to the naked eye, and driver support technology "ProPILOT." We were particular about producing a video and sound show and created an exhilarating large-scale video show making use of the pavilion's grand scale. To achieve this grand plan, Panasonic has provided a total solution from design and installation to operation and support. Several high brightness laser projectors and newly developed ultra-short-throw lenses were used in two areas where the main content was played.

Play with the Future of Mobility at an Interactive Entertainment Facility

The Nissan Pavilion is a 10,000 m² hands-on entertainment facility to deliver to a wide range of clientele Nissan's vision for "Intelligent Mobility" applying its most advanced technology through various interactive and display content. The pavilion is open for a limited time from August 1 to October 23, 2020.

- Location: 6-2-1 Minato Mirai, Nishi-ku, Yokohama-shi, Kanagawa 220-0012, Japan
- URL <https://www.nissan.co.jp/BRAND/PAVILION/>



▲ Opened in Minato Mirai 21 Ward which is located close to Nissan Motor's Global Headquarters.

Effects Achieved by System Installation

Massive Wall Video to Enhance a Leading Edge EV Display

The pavilion was used to unveil the newly developed crossover EV "Nissan ARIYA." Of the various displays used to showcase Nissan innovations, what particularly draws people's attention is the massive 40m wide × 7m high wall onto which a colorful video is projected. Matsui remarked, "we wanted to convey a sense of wonder and anticipation for the future to visitors making use of the scale of the pavilion. Our focus was on having an impact so that the new cars and the video grab your eye upon entering the building." The movie showcases the Nissan logo which has been revamped for the first time in 19 years. Twenty units of 30,000 lm high brightness PT-RZ31KJ laser projectors are used to project the film onto a giant wall, making for an

invigorating spectacle. To project a clear, high brightness video onto a massive curved wall under a bright environment which admits external light, the projection surface was divided into ten areas with two projectors used to project video onto one area. As this was also the exhibition area, the cars and display equipment obstructing the video projection was also an issue. As a solution, the newly developed L-shaped ultra-short-throw lens ET-D3LEU100 was utilized. This solution narrowed the projection distance by a wide margin, making it difficult for shadows to form when visitors or display equipment come in close proximity to the wall. DLP® technology enables visitors to enjoy clear video images (dots cannot be seen) at close proximity to the wall.

180°Screen



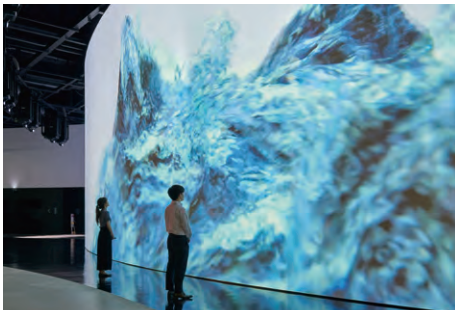
▲ Video is projected by stacking two vertically-installed PT-RZ31KJ. Impressive high brightness video is achieved by using two projectors to project video onto a single projection space.



▲ Close-distance projection is achieved through ultra-short-throw lens ET-D3LEU100



▲ Projectors are spaced out evenly across the curved wall surface.



▲ The use of ultra-short-throw lenses prevent shadows from impinging into the video even if people get close to the wall surface, and DLP® format enables beautiful images to be enjoyed up close at high resolution.

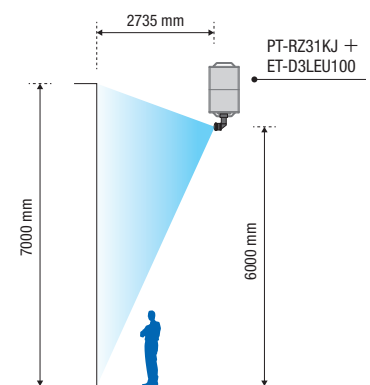
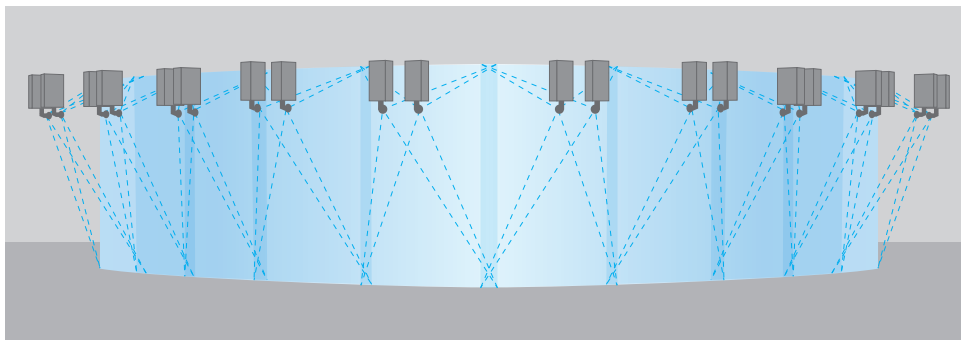


▲ A concept movie in which the new Nissan logo naturally follows from a series of organic motifs.



▲ The video also focuses in on the vehicle to heighten the innovative image of the Nissan ARIYA.

Projection Image

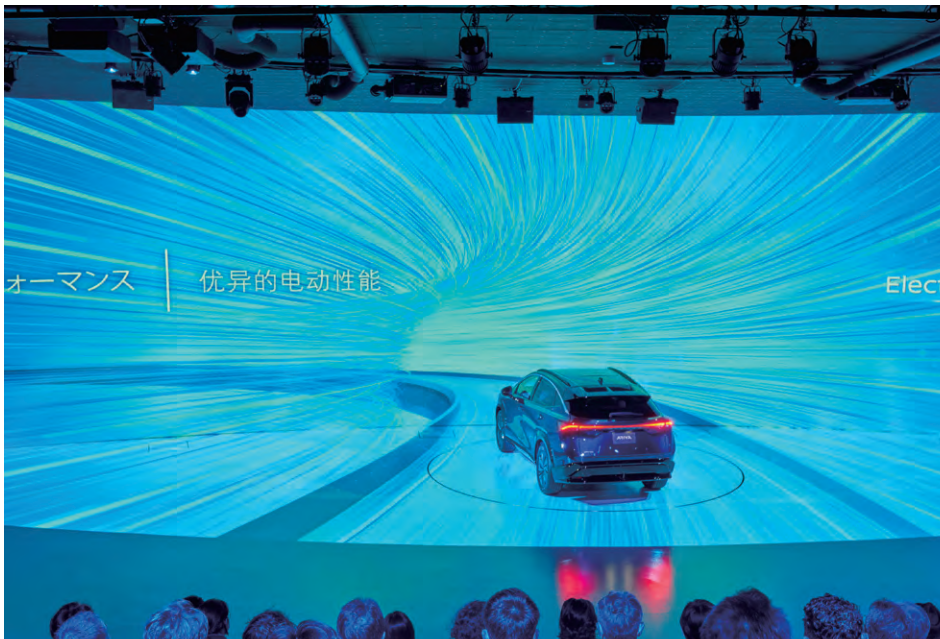


Creating a Virtual Environment through the Flexible Use of Ultra-Short-Throw Lenses

“The Theater” is a theater space comprised of a 32m wide x 6m high curved screen and spectator seats. According to Matsui, “the 20 minute video shows the new logo which is the new face of Nissan, the company’s unique leading-edge technology, and a future that changes together with electric vehicles. We were particular about immersing visitors in an exciting and moving virtual world in which the actual cars and visitors merge with the video content.” 4K resolution PT-RQ22KJ are used to project video onto the curved front screen, and PT-RZ21KJ are used to project video onto the floor surface. This creates a virtual environment where video fills the entire visual field

of visitors as seen from the spectator seats. The interactive content includes an entertainment show which links an actual Nissan ARIYA with video projected onto the wall and floor surfaces to make it seem like the car is actually travelling around town, a virtual ride attraction in which the participant drives an electric formula car around the world’s cities as though he is in a race, and virtual tennis utilizing “Invisible to Visible (I2V)” technology to visualize what the participant cannot see with the naked eye. The ultra-short-throw lens ET-D3LEU100 is also used here for all projectors to create an immersive environment so that participants can thoroughly enjoy Nissan’s worldview.

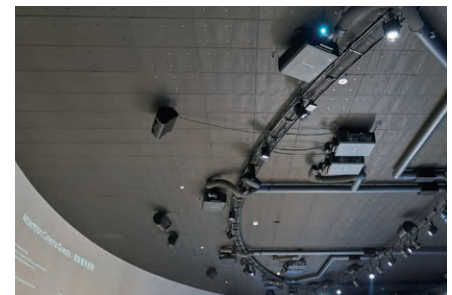
THE THEATER



▲ Thrilling content in which the Nissan ARIYA arrives on scene which blends with the video, creating the sense that it is actually driving down the road.



▲ 4K projector PT-RQ22KJ is utilized for wall projection



▲ Multiple projectors mounted on the ceiling. Ultra-short-throw lenses are adopted to maximize the effect of the video content.



▲ Immersiveness is heightened by playing video on the wall which is linked with video on the floor.

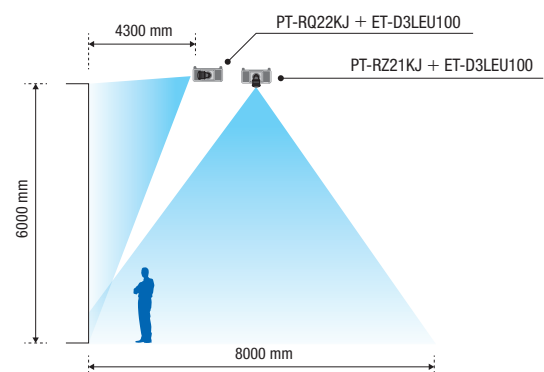
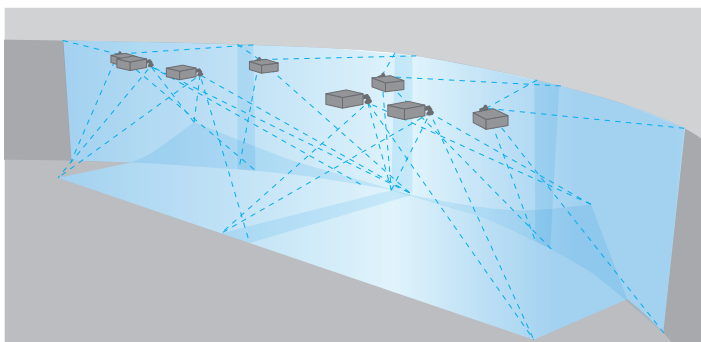


▲ Entertainment content in which the participant is immersed in the experience of driving through the world’s cities from the driver’s point of view in an electric formula car.



▲ Interactive content applying Nissan’s “I2V” technology to visualize what can’t be seen with the naked eye.

■ Projection Image



Comment from Nissan Pavilion Director

Visitors were impressed by the thrill of the show

The moment the video was projected onto the 180°screen, I was so moved and inspired that I got goose bumps. I was very thrilled by the approaching images. "The Theater" is an important climax to the pavilion that visitors can get excited about. Visitors are sure to be moved by this spatial performance that links video and sound. An extraordinary amount of thought and effort went into the making of this pavilion. We are very grateful for Panasonic's state-of-the-art video technology and staff support to communicate to the consumer public the Nissan Motor concept which has reached a new stage in its evolution.



Nissan Motor Co., Ltd.
Global Brand Experience Department
Nissan Pavilion Director
Keita Matsui

*Affiliation as of July 2020.

Equipment introduced



3 Chip DLP® Laser Projector
PT-RZ31KJ (×20 Units)



3 Chip DLP® Laser Projector
PT-RQ22KJ (×4 Units)
PT-RZ21KJ (×4 Units)



Ultra-Short-Throw Lens for 3 Chip DLP® Projector
ET-D3LEU100 (×28 Units)

A number of sound equipment was supplied and total support was provided for this spatial performance

A number of sound equipment including speakers was implemented both inside and outside the pavilion. To deliver an exciting experience for visitors, we are providing high quality total support for video and audio staging.



▲2-way speakers were applied inside the pavilion to realize powerful sound staging



▲All-weather speakers were installed on lighting poles outside the pavilion.



2-Way Speaker
WS-AR200-K (×39 Units)



2-Way Speaker
WS-AR080-K (×6 Units)



Sub-Woofer
WS-HP450 (×4 Units)



Ceiling Embedded Speaker
WS-A44 (×7 Units)



Ceiling Embedded Speaker
WS-A22T (×16 Units)



All-Weather Speaker
WS-LB301 (×12 Units)



Digital Power Amp
WP-DM912 (×13 Units)
WP-DM924 (×1 Units)



Digital Mixer
WR-DX002 (×2 Units)



Power Supply Control Unit
WU-L61 (×2 Units)



Power Supply Control Unit
WU-L67 (×17 Units)

Supplier Panasonic System Solutions Japan Co., Ltd.

Media & Entertainment Business Division
Connected Solutions Company, Panasonic Corporation