

## Panasonic supports the world's largest projection-mapped display according to GUINNESS WORLD RECORDS™.

GUINNESS WORLD RECORDS™ title for the largest architectural projection-mapped display (permanent), recorded on February 25, 2024



Projection-mapped display  
on the Tokyo Metropolitan Government building  
**TOKYO Night & Light**

Installation: February 2024  
Location: Kanto region, Japan

February 2024 saw the launch of TOKYO Night & Light, a projection-mapped display on the Tokyo Metropolitan Government building that has become a new Tokyo landmark.

### Key points

- A bright, high-resolution image is projected across the Tokyo Metropolitan Government building by a projector with the world's highest brightness\*.
- Housings were developed to withstand the harsh outdoor conditions.
- A RAMSA audio system creates lifelike immersive sound.
- AcroSign and a Remotely Managed Service are used for a fully remote cloud-based operation and management system.

### Background

#### Entertainment that serves as a nighttime tourist attraction

In recent years, events using projection mapping have garnered global attention as a way for cities to increase their tourist value at night. Their design has evolved at a startling rate and the content is becoming more sophisticated every day. Equally, there is a call for higher-performance projectors that can recreate every detail that makes the content so appealing, but the industry has faced a shortage of staff who can handle such advanced projectors, and has struggled with the higher labor costs required for the permanent staff handling the projection. There has also been a need for measures to make operations run more smoothly.

### Solution

#### Smooth remote operation of an immersive spatial presentation

To execute a world-leading, highly artistic video presentation, it takes a total of 40 of the world's brightest\* projectors: a 50,000 lm model and 30,500 lm model. Every last detail of the projection design was carefully calculated to create the dynamic projection on the enormous Tokyo Metropolitan Government building. The immersive spatial presentation combines pictures and audio, with 22 RAMSA line-array speakers creating lifelike immersive sound. No on-site operation and management personnel are needed: everything is controlled fully remotely using digital signage solution AcroSign and a Remotely Managed Service that enables remote monitoring every day of the year.

### About TOKYO Night & Light

TOKYO Night & Light uses the Tokyo Metropolitan Government building as a canvas for a wide range of quintessentially Japanese art. In February 2024, it earned a GUINNESS WORLD RECORDS™ title for the largest architectural projection-mapped display (permanent).



- Dates: Every day (weekdays, weekends and holidays; screening schedule below).
- URL: <https://tokyoprojectionmappingproject.jp/en/event/20240225>



▲ Tokyo Metropolitan Government Main Building No. 1, where the projection mapping is displayed.

\*PT-RQ50K 50,000 lm projector; among projectors weighing up to 150 kg (excluding the lens); according to a survey by Panasonic in November 2019.

# Projection mapping



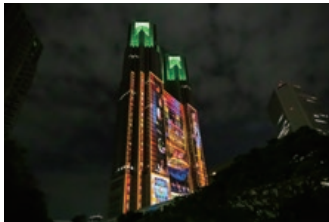
▲ A large crowd gathers to see our GODZILLA: ATTACK ON TOKYO show, which was launched at the end of April



▲ The colorful *The First Movement: Creation from Nature* section of TOKYO CONCERTO



▲ The quintessentially Japanese *The Second Movement: Cultural Diversity* section of TOKYO CONCERTO



▲ The show lights up the night in west Shinjuku, and is visible from buildings across the street, like the Shinjuku NS Building



▲ Our 50,000 lm high-brightness projector, the PT-RQ50K (before being placed in its housing)



▲ Sets of two RAMSA waterproof line-array speakers provide the sound



▲ A row of 11 pairs of speakers are suspended from the roof to create an immersive acoustic space



▲ An operator monitors the show using AcroSign and a Remotely Managed Service



▲ This room with racks of media players is the audiovisual center of the show

## About the system

### The culmination of years of design and technical experience

It takes 40 projectors to project images on the 13,904.956m<sup>2</sup> wall of the Tokyo Metropolitan Government's Main Building No.1, so the first thing we needed to do was survey the wall where the images were to be projected and the building where the projectors were to be installed, and create CAD data accordingly. In this case, we decided to install the projectors on the roof, so we deliberated right down to the millimeter on where to install the projectors, avoiding solar panels and other existing structures, and what projection angle to use. We also developed custom housings that could bear the projectors' hefty weight while being durable enough to withstand harsh outdoor conditions like earthquakes, water and dust. This enabled us to build an efficient system that could get the most out of the projector's capabilities and maintain picture quality throughout long-term operation.

### Fully remote operation through the cloud—no on-site staff needed

AcroSign, a digital signage solution, was used to build an operating system enabling content to be screened automatically according to a projection schedule, with no on-site staff needed. All necessary operations are performed remotely. Management and maintenance of the projectors is another vital element of running projection-mapped shows every day. For this, we use a Remotely Managed Service to prevent issues. The footage from cameras installed on-site is checked and monitored every day of the year. If an issue with a projector occurs, an alert is issued. Maintenance services are also provided so that the quality of the show is always at its best for viewers.

### Installed equipment

- 3-Chip DLP™ Projector  
PT-RQ50K (50,000 lm) x 20, PT-RZ34K (30,500 lm) x 20
- AcroSign digital signage solution\*1
- Remotely Managed Service\*2
- RAMSA Line-Array Speaker WS-LA500AWP x 22\*1
- RAMSA Digital Power Amplifier WP-DM948 x 4 / DM912 x 4\*1
- RAMSA Digital Mixer WR-DX200DAN x 1\*1

\*1: These products and services are only available in Japan. \*2: The service's contents vary by country or region. Please contact your local Panasonic sales representative for detailed information.

