

Comments from National Center for the Promotion of Cultural Properties Specialist

An experience beyond appreciating the actual object, made possible by digital contents

In this project we adopted an exhibition style that is not usually possible with actual cultural properties. There are limits to the number of days that Japan's art, especially national treasures and important cultural properties, can be exhibited annually. In addition, these properties are generally preserved in display cases with dark lighting of 100 lux or less, in which the temperature and humidity are maintained at fixed levels. By using high-definition replicas of cultural properties and combining them with projection mapping to add motion, we were able to create an enjoyable performance and capture the interest of children and of people unacquainted with cultural properties. We will be delighted if more and more visitors enjoy the "Becoming Japanese Art" exhibition scheduled to be held at the Oita Prefectural Art Museum from February 2021 to May 2021, and other museums and institutions also express interest in this project of the National Center for the Promotion of Cultural Properties and in hosting similar projects. We also hope that, after experiencing this beautiful video production, people will develop an interest in Japanese art and feel a closer connection to Japan's cultural properties.



Yumi Takagi
Specialist
National Center for the Promotion of Cultural Properties
National Institutes for Cultural Heritage

*Affiliation at time of interview.

Artist Ryo Inoue conducts a press preview

Artist Ryo Inoue of NHK Educational TV's "Art Tunes!" conducted a press preview for the "Becoming Japanese Art—Round Two" exhibition.



▲Artist Ryo Inoue, the lyricist, composer, animator, and singer in the "Art Tunes!" program. Inoue has captured the hearts of many children through the original perspective of his unique pop animations and unforgettable melodies.

A Pair of Dates on the Front and Back of a Folding Screen



▲Presenting the unified movement of the front and back sides of the folding screen by stepping on the sensor switch.

A Live Performance by the Pine Trees



▲Explaining the movements in the live performance of the Pine Tree Dancers in coordination with the song by Ryo Inoue.

A Visit to the Writing Box with the Eight-Plank Bridge



▲Introducing the movement of fish triggered when visitors walk around the ponds

Equipment introduced



1-Chip DLP® Projector
PT-RZ870JLW (White Model; ×8 Units)
PT-RZ870JLB (Black Model; ×4 Units)



Zoom Lens
ET-DLE150 (×4 Units)



Zoom Lens
ET-DLE060 (×6 Units)



Zoom Lens
ET-DLE085 (×2 Units)

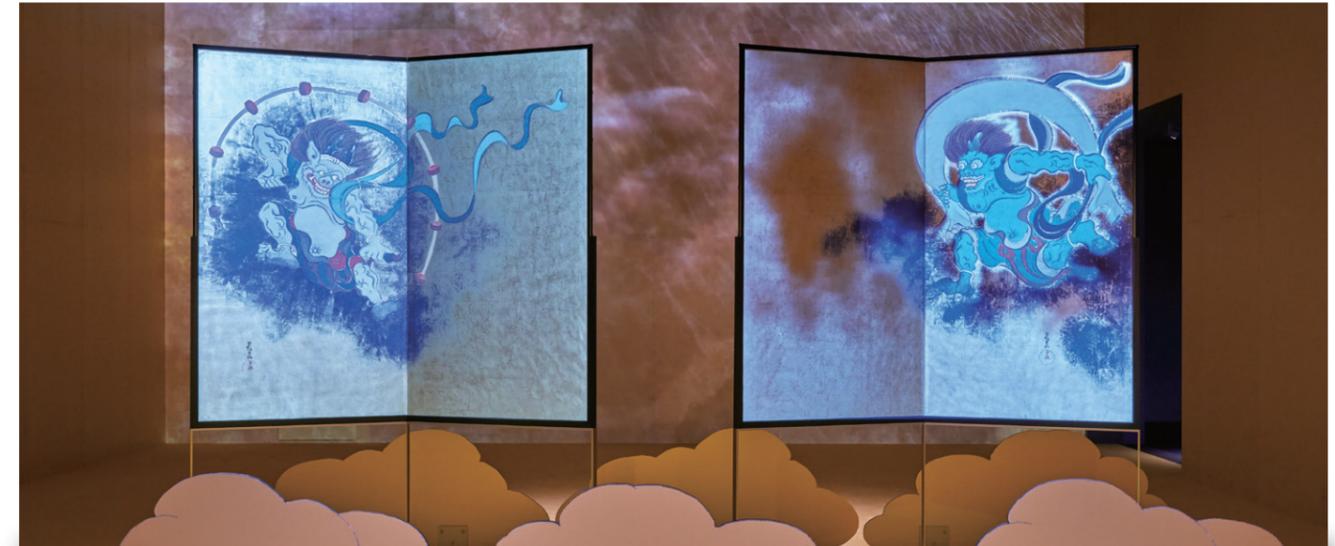


Zoom Lens (Standard Lens)
ET-DLE170 (×2 Units)

Supplier Kyeoisha Co., Ltd. Panasonic System Solutions Japan Co., Ltd.

Media & Entertainment Business Division
Connected Solutions Company, Panasonic Corporation

Demonstrating the powerful impact of projection mapping in an interactive exhibit, conveying the fascinating aspects of Japan's cultural properties to the present generation



Becoming Japanese Art—Round Two
National Center for the Promotion of Cultural Properties
National Institutes for Cultural Heritage

Installed system: Projection Mapping

Date of installation: September 2020
Location: Kanto area

Challenge:

·To communicate to people of the present generation about cultural properties that tend to be regarded as stuffy

Solutions:

·Deliver dynamic projection mapping via high-definition projectors to enable even people unacquainted with cultural properties to enjoy them

“For the visitors who came to enjoy this exhibition, we chose Panasonic projectors, long trusted for their outstanding reliability.”

Yumi Takagi
Specialist
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Background of System Installation

Holding the sensational new interactive exhibition "Becoming Japanese Art—Round Two"

"Becoming Japanese Art—Round Two" was held from Tuesday October 27, 2020 through Sunday December 6, 2020 at the Tokyo National Museum. This new type of interactive exhibition was created by a collaboration between Tokyo National Museum and NHK Educational TV's "Art Tunes!" program, which presents world art through songs and animations by artist Ryo Inoue. This exhibition, a second edition of the "Becoming Japanese Art" event that drew approximately 100,000 visitors in 2018, was composed of three areas themed on national treasures and important cultural properties. Ten Panasonic projectors were used in this exhibition, employing dynamic projection mapping.

Reasons for System Installation

Experienced ease of use and utmost reliability from the previous exhibition.

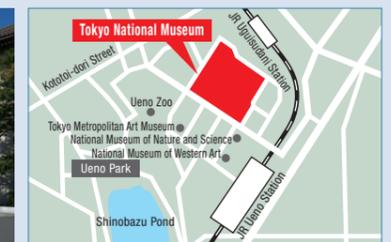
Here we have Ms. Takagi of the National Center for the Promotion of Cultural Properties, high-precision video production, high-performance and easy-to-use projectors were required to deliver the kind of stability that could present an exhibition in which not a single day was marred by trouble. "We used Panasonic projectors for previous exhibitions. We were impressed by how clearly and minutely we were able to focus on details, and also by how convenient they were to operate. There was no need for a cooling-off period after the projectors were switched off. Also, we were convinced of the utmost reliability of the projectors by seeing how they performed smoothly for many hours, day after day."

Demonstrating the attractiveness of cultural properties to multitudes and transmitting them to the future

The National Center for the Promotion of Cultural Properties was established as part of the National Institutes for Cultural Heritage in July 2018 to promote Japan's cultural properties more widely. The Center is dedicated to carrying out project development for new content and programs, through which people can appreciate national treasures and important cultural properties while enjoying them.

■ Location: Tokyo National Museum, 13-9 Ueno Park, Taito-ku, Tokyo 110-8712, Japan

■ URL <https://cpcp.nich.go.jp/>



▲Tokyo National Museum, site of the "Becoming Japanese Art—Round Two" exhibition

Effects Achieved by System Installation

A Pair of Dates on the Front and Back of a Folding Screen

Making an interactive video production viable

In the first exhibit, A Pair of Dates on the Front and Back of a Folding Screen, reproductions of a pair of two-panel folding screens depicting the Wind God on the right and the Thunder God on the left are placed in the center of the room. Approximately 100 years after Ogata Korin painted *Wind God and Thunder God*, Sakai Hoitsu painted *Flowering Plants of Summer and Autumn* on the reverse side. These screens originally each constituted a single work on both sides, but for preservation purposes the front and back sides are stored separately. For the reproduction in the "Becoming Japanese Art—Round Two" exhibition, the front and back sides were reunited. Panasonic's 1-Chip DLP® Projector PT-RZ870J made both sides move in unison via projection mapping. Sensor switches were placed in front of the folding screens. When a visitor stepped on the switch, a breeze would blow over the Wind God and lightning would strike the Thunder God on the relevant screen. Simultaneously, turbulence and lightning would strike the back side of the folding screen, causing the plants on Flowering Plants of Summer and Autumn to waver violently. In addition, a large wall about 10 meters wide was placed behind the folding screens, and a dynamic image was projected over the entirety of the wall. Wind God and Thunder God would fly about and then plunge into the folding screens, creating bursts of wind and lightning. This video production allowed visitors to appreciate the cultural properties while enjoying themselves.



▲The Wind God and Thunder God folding screens present a dynamic performance matched to the mapping on the wall behind it.



▲When visitors stepped on the sensor switch in front of the folding screen, the Wind God and the Thunder God were illuminated and lightning and wind were created.



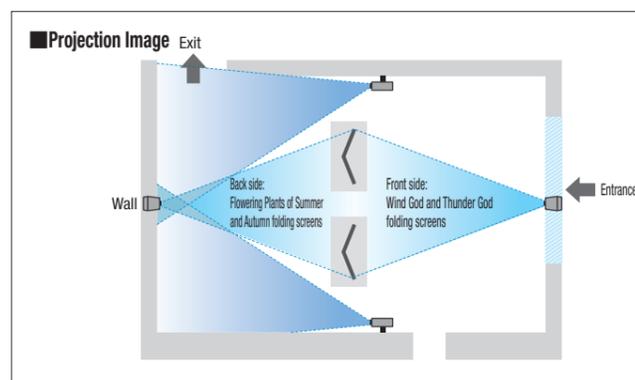
▲Thanks to the DLP® System, the grid of pixels could barely be distinguished even up close, and the forceful cultural properties were expressed in detail.



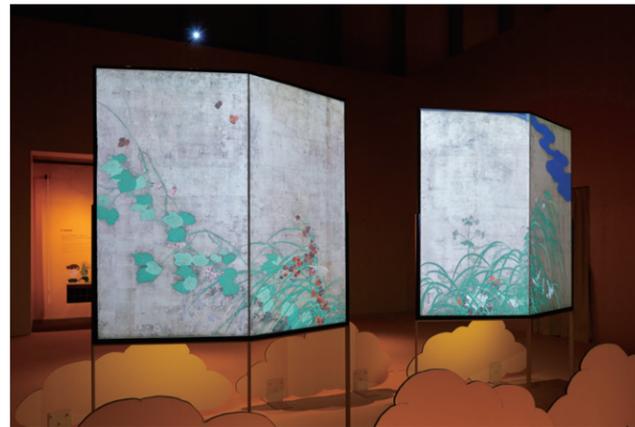
▲We succeeded in creating a space in which visitors are unaware of the projector set above the wall.

Superb positioning ability can adapt to any environment

On the upper part of the high wall in the display area we set projectors for the Wind God and Thunder God folding screens and the Flowering Plants of Summer and Autumn folding screens face to face. We placed two PT-RZ870J projectors on each side of the wall to project onto the wall. "The PT-RZ870J can be angled or inclined in any way we choose. This ability to position the projector anywhere allowed us flexibility in planning, and was a great help," said Ms. Takagi. Now that the project has closed its run at the Tokyo National Museum it will reopen at the Oita Prefectural Art Museum. By simply changing lenses, the projectors can be adapted to various projection distances, even when spaces are different sizes. The ability to maintain the quality level of the event just by supplying suitable projectors and lenses to the exhibition site made a favorable impression.



Click to see the video in which artist Ryo Inoue introduces the exhibit, A Pair of Dates on the Front and Back of a Folding Screen.



▲Flowering Plants of Summer and Autumn on the back of the folding screens. This side moved in unison with the Wind God and Thunder God side on the front, creating an interactive performance in which lightning strikes and wind blows.



▲Thunder God flew over the wall and then plunged onto the folding screen, accompanied by the sound of thunder.

A Live Performance by the Pine Trees

Cinematic beauty made possible by the 1-Chip DLP® System

Pine Trees, which is a national treasure, is a pair of six-panel folding screens with an ink painting of a pine forest partially visible through an enveloping mist. The actual work creates a subdued impression, but in this project it is combined with the Pine Tree Dancers of "Art Tunes!" so that the pine trees in the middle of the folding screens perform a dance. The folding screens stand on a stage approximately 8 meters wide, and two PT-RZ870J projectors project images upon them. The folding screens, with their alternating



▲Projecting images on the folding screens using two PT-RZ870J projectors



▲PT-RZ870J projectors positioned to project on the floor to create the appearance of snow piling ever higher

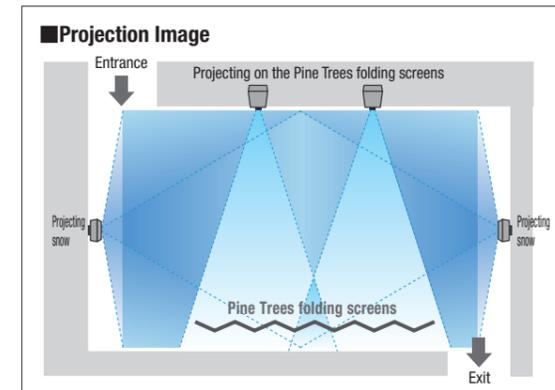
▲PT-RZ870J projectors affixed on a wall

Click to see the video in which artist Ryo Inoue introduces the exhibit, A Live Performance by the Pine Trees.

mountain and valley folds, serve as the screens, and the appearance of the moving pine trees is beautifully reproduced thanks to the high-contrast DLP® System. During the performance, two PT-RZ870J projectors positioned to project from the ceiling to the floor project snow that piles up on the floor of the exhibition area in unison with scenes in which snow begins falling during the performance. This was a refined art exhibition containing both stillness and motion thanks to the superb white balance and coloration.



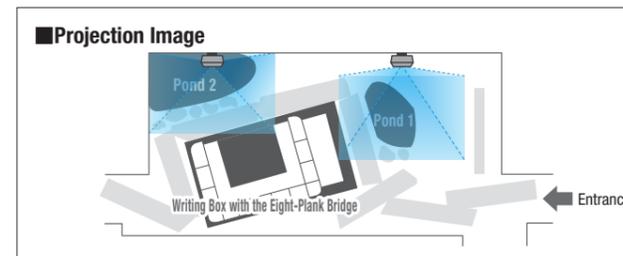
▲High-definition image, projecting even fine characters clearly



A Visit to the Writing Box with the Eight-Plank Bridge

Expressing the realistic movements of swimming fish

This area is themed after the national treasure *Writing Box with the Eight-Plank Bridge*. Bridges and ponds are depicted surrounding a huge writing box approximately 2 meters in height. A certain number of fish are projected in the ponds. The fish swim up when visitors approach, and swim in circles when they crouch. Using images of falling rain and fireflies circling in flight, projected by two PT-RZ870J projectors facing the ponds, the interactive performances of the fish in the ponds and the transitions in motion create an exciting atmosphere.



Click to see the video in which artist Ryo Inoue introduces the exhibit, A Visit to the Writing Box with the Eight-Plank Bridge.



▲Interactive projection mapping, with fish swimming up to meet visitors walking through the exhibit. A white PT-RZ870J model is used in this area.