

# An Interactive Art Event Merging World Heritage Site Nijo-jo Castle with State-of-the-Art Digital Representation



## FLOWERS BY NAKED 2019 Nijo-jo Castle, Kyoto

Installed system: **Projection Mapping**

Date of installation: December 2019  
Location: Kinki region

### Challenge:

• A high luminance projector was required to implement projection mapping over a wide area.

### Solution:

• A high luminance laser projector was applied to achieve a clear and bright video production.

“

The adopted model is not only bright, but also compact and excellent in installation, and we think that it will be used frequently in future events. We also trust the dustproof and heat-resistant properties unique to laser projectors.

”

**NAKED Inc.**

## Background of System Installation

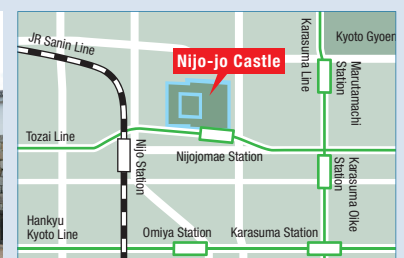
### Interactive garden that is experienced with the five senses held at world heritage site Nijo-jo Castle

“FLOWERS BY NAKED” is an interactive flower art event to be enjoyed with the five senses through the use of flower arrangements, objet, video, interactives, smells, and music. It was produced in Japan nationwide and overseas by creative company NAKED Inc. The first such event was also held at Nijo-jo Castle in 2018 under the theme “Flowers and Tradition.” The second event at Nijo-jo Castle was held under the theme “Phoenix” in commemoration of the 25th anniversary of Nijo-jo Castle’s registration as a world heritage site. Nijo-jo Castle in the Autumn evening will be brilliantly lit up and colored through projection mapping to create a magical world.

### Ornate Momoyama cultural relics that still remain after 400 years

Nijo-jo Castle was built in 1603 by the first Shogun of the Edo Shogunate, Ieyasu Tokugawa. The castle played a central role throughout Japan’s history since the Edo Period, and was the stage for the restoration of imperial rule in 1867. It was registered as a world cultural heritage by UNESCO in 1994, and today the entire area has been designated a world cultural heritage and a historic landmark.

- Location: 541 Nijo-jo-cho, Horikawa-nishi-iru, Nijo-jo-dori, Nakagyo-ku, Kyoto City, Kyoto 604-8301, Japan
- URL <https://flowers.naked.works/2019nijo-jo/>



▲ A prominent tourist destination in Kyoto, visited by approximately 2.43 million people a year (FY2017).

## Reasons for System Installation

### The staging area was expanded throughout the entire Nijo-jo Castle grounds, and high luminance projectors were introduced

In 2018, the show was primarily focused within Ninomaru-goten Daidokoro. For the 2019 event, the staging area was expanded throughout Nijo-jo Castle including the outdoors so that visitors can move about the castle grounds following the narrative of the theme. As projection mapping onto the stone rampart of the inner moat was wide-range and long-distance, a higher luminance projector was required. Four new Panasonic Laser Projector PT-RZ120JLW were introduced with a brightness of 12000 lm.



## Effects Achieved by System Installation

### Combining historical structures with advanced digital art

In addition to the concept behind "FLOWERS BY NAKED" is to produce a show using flowers, the theme of the overall content is "Phoenix" which is a symbol of everlasting prosperity. The video projected in several areas inside the castle grounds depicts the phoenix as the incarnation of the flowers taking flight, as Autumn trees and flowers bloom abundantly in its wake. These images brilliantly color the structures and objets d'art which serve as a display screen.

NAKED Inc.'s production merges digital images with structures that are national treasures and important cultural assets in a way which conveys Nijo-jo Castle's historical value and culture to visitors. This time, the stone rampart of the inner moat was transformed into a massive screen for a new projection mapping show. The phoenix flies about amidst the brilliantly colored flowers, mesmerizing onlookers and immersing them in this dreamlike world.

### Inner moat

#### Autumn night Shuushou



▲ A scene of Autumn trees and flowers transforming into the feathers of the phoenix is depicted with projection mapping. The brilliant images are reflected on the water's surface, transporting the visitors to a dream world.



▲ As projection onto the stone rampart surrounding the moat requires a high degree of luminous power, four PT-RZ120JLW units with a brightness of 12000 lm were employed.



▲ The phoenix dances about in the moat and flowers bloom.

### Higashi Ote-mon Gate

#### BIG BOOK



▲ The prologue of the narrative is displayed in a "book objet" which is a centerpiece of FLOWERS BY NAKED.



◀ Brilliantly-colored video is projected by PT-RZ670JB.

### Nagaya-mon Gate

#### Autumn diameter



▲ When pedestrians are detected by sensors, Autumn leaves begin to fall and a carpet of leaves spreads out along the lane.



◀ Four PT-DZ780JB units project video onto the lane. Installation angles can be set flexibly.



**Staging a new type of show in collaboration with flower arrangements**

A show in collaboration with flowers arranged by Ikenobo, the head of the Ikenobo School of Flower Arrangement was staged within Ninomaru-goten Daidokoro, an important cultural asset. A new form of expression was attempted involving a hologram mesh screen, with the aim of integrating actual flower arrangements and video within the spatial environment. When a video is projected onto an apparently transparent screen set up in front of flower

arrangements, a brilliantly colored phoenix and flowers dance about within the space. The narrative reaches its finale when the phoenix as the incarnation of the flowers at last becomes a real flower. In other areas, there is an interactive show in which the video changes according to people's movements, a show involving music and smells, and a light show. Visitors can enjoy the transient beauty and life force of flowers with their five senses.

**Daidokoro, an Important cultural asset (Indoor)**

**Phoenix**



▲ Two PT-RZ970JW units projected images onto a hologram mesh screen installed between the earth floor and the wooden floor.



▲ In the finale of the narrative, the video ends and the flower arrangements appear, depicting how the phoenix is transmogrified into actual flowers.

▲ Collaboration with Ikenobo, the head of the Ikenobo School of Flower Arrangement. A spectacular show in which a hologram mesh screen is effectively used to layer and unite digital video of the phoenix onto actual flower arrangements.

**Daidokoro, an Important cultural asset (Outdoor)**

**Ancient and modern round windows -autumn herbs-**

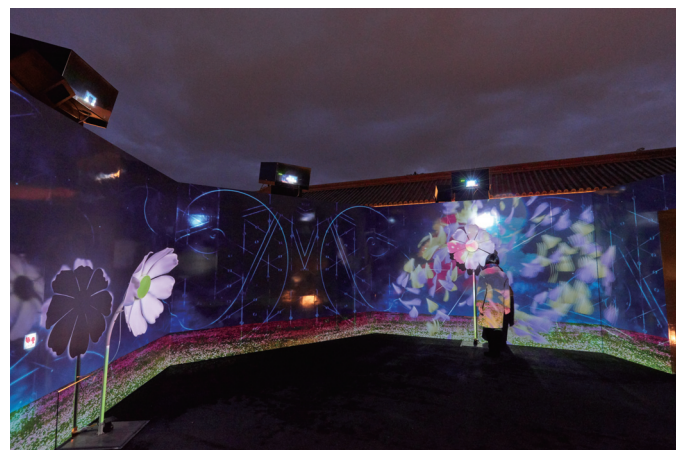


▲ An interactive video show. When a visitor looks into the round window projected onto the wall, the window opens to reveal a bounty of Autumnal seven herbs.

◀ Visitors were bunched together in front of the round window, enjoying the changing scenery and flowers.

**Daidokoro, an Important cultural asset (Outdoor)**

**Flower play "Cosmos and Dandelion"**



▲ Interactive art area surrounded by a 360° screen. When a visitor stands in front of the cosmos, the smell of the cosmos flower is accompanied by the image of fluttering petals.

◀ Dandelion floss flies up in the air when a visitor breathes on the dandelion object.

## Guide Map

### Seiryu-en Garden

#### Tears of the phoenix



In coordination with the song of the phoenix, natural Autumn leaves light up, taking on color. The tears of the phoenix dance about in this magical Autumn installation space.

### Inner moat

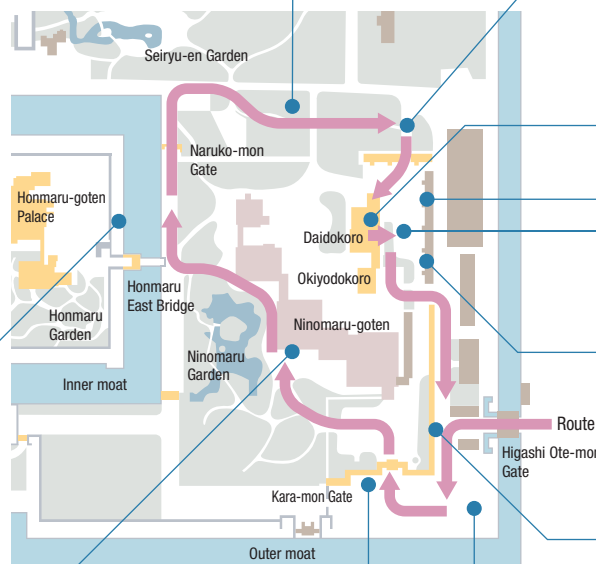
#### Autumn night Shuushou

**PT-RZ120JLW** (x4 units)  
**ET-DLE250** (x4 units)

### Ninomaru-goten, a national treasure

#### Fall Rishu

Ninomaru-goten, a national treasure, is colorfully lit up with images of the phoenix and Autumnal flowers using projection mapping.



### Kara-mon Gate, an Important cultural asset

#### Autumn wind Akikaze

**PT-RZ670JB** (x4 units)  
**ET-DLE170** (x4 units)



Projection mapping at Kara-mon Gate, and important cultural asset. The phoenix as the incarnation of the flowers lifts off.

### Nagaya-mon Gate

#### Autumn diameter

**PT-DZ780JB** (x4 units)  
**ET-DLE060** (x4 units)

### Daidokoro, an Important cultural asset

#### Phoenix

**PT-RZ970JW** (x2 units)  
**ET-DLE085** (x2 units)

#### Flower play "Cosmos and Dandelion"

**PT-DZ780JB** (x6 units)  
**ET-DLE150** (x6 units)

#### Ancient and modern round windows -autumn herbs-

**PT-DZ780JB** (x2 units)  
**ET-DLE170** (x2 units)

### Higashi Ote-mon Gate

#### Introduction

**PT-RZ660JB** (x2 units)  
**ET-DLE150** (x2 units)



An opening movie greets visitors passing through Higashi Ote-mon Gate.

#### BIG BOOK

**PT-RZ670JB** (x1 unit)  
**ET-DLE170** (x1 unit)

## Perspectives

### Evaluating the reliability of the laser projector

#### Collaborations with future state-of-the-art technology can be expected

Together with the expansion of the exhibition area this time, the PT-RZ120JLW was utilized to accommodate content requiring video brightness. NAKED Inc. was recognized for employing a projector with a brightness of 12000 lm and compact enclosure size. It is anticipated that it will be frequently applied in other events henceforth. Irrespective of the adopted model, the dust resistance and thermal resistance of the laser projector is also dependable. This time, NAKED Inc. took on the challenge of staging a show utilizing a hologram mesh screen. NAKED Inc. will broaden the potential of its productions through collaboration with the latest Panasonic technology.

## Equipment introduced



1-Chip DLP™ Laser Projector  
**PT-RZ120JLW** (x4 units)



Zoom Lens for 1-Chip DLP™ Projector  
**ET-DLE250** (x4 units)

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

Media & Entertainment Business Division  
Connected Solutions Company, Panasonic Corporation