

Panasonic

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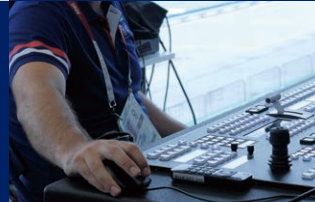
Sharing the Passion

TOKYO 2020

Case Study: Panasonic's Contribution to the
Olympic and Paralympic Games Tokyo 2020



Worldwide Partner

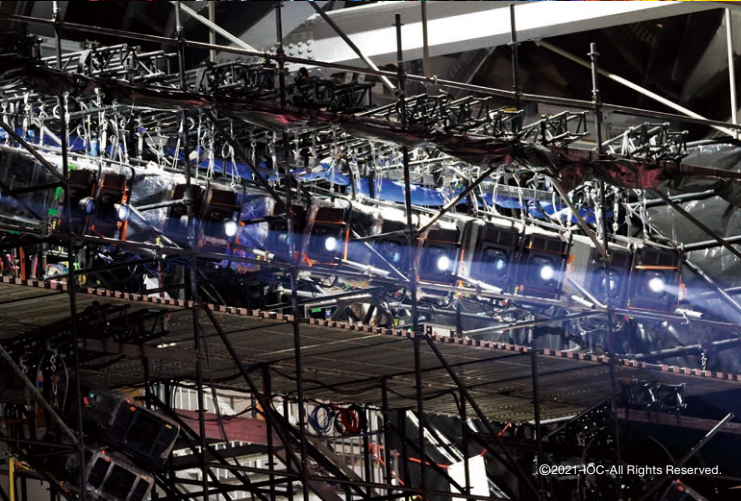


TOKYO 2020
SPECIAL SITE



Panasonic Delivers Immersive Experiences for the Success of the Olympic and Paralympic Games Tokyo 2020

The Olympic and Paralympic Games Tokyo 2020 was staged over 30 days under the slogan "United by Emotion." The Games, which were postponed for about a year, saw many events held without spectators in attendance. In addition to equipment provision, including ultra-bright projectors, LED large-screen display systems, and audio systems, Panasonic committed holistic on-site support to the Tokyo 2020 Games with expertise demonstrated through on-site video distribution and security system support at about 50 competition venues.



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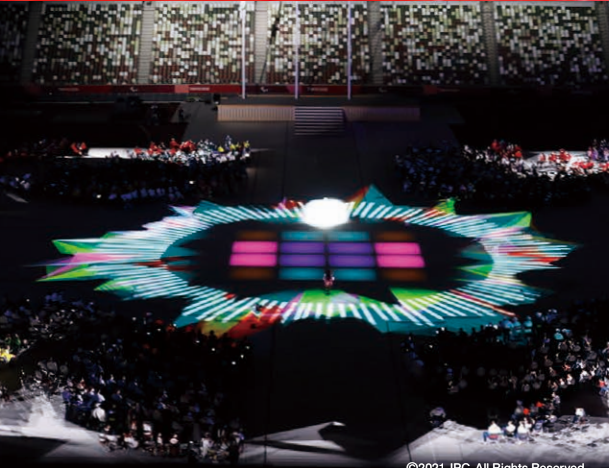
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The Opening and Closing Ceremonies

The Opening and Closing Ceremonies were brought to life by a projection-mapping system designed, supplied, and installed by Panasonic. About 60 of our PT-RQ50K 3-Chip DLP™ laser projectors supported these spectacular productions, decorating the field with vividly colorful light-art including the overwhelming “Japan Red” crimson referenced during the Olympic Games Opening Ceremony. Music and sound delivered by RAMSA line-array speakers played a central role and engaged viewers watching from all around the world.



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From International Broadcasting Centre (IBC) to the World

International Broadcasting Centre (IBC), located at Tokyo Big Sight, provided equipment and technical support that allowed images of athletes and competition events to be shared around the world. IBC not only supplied cameras, monitors, and production equipment to the Olympic Broadcasting Services (OBS) and select broadcast rights-holders, it also took charge of broadcast system design, installation, and technical support, and facilitated broadcasts from about 50 competition venues.

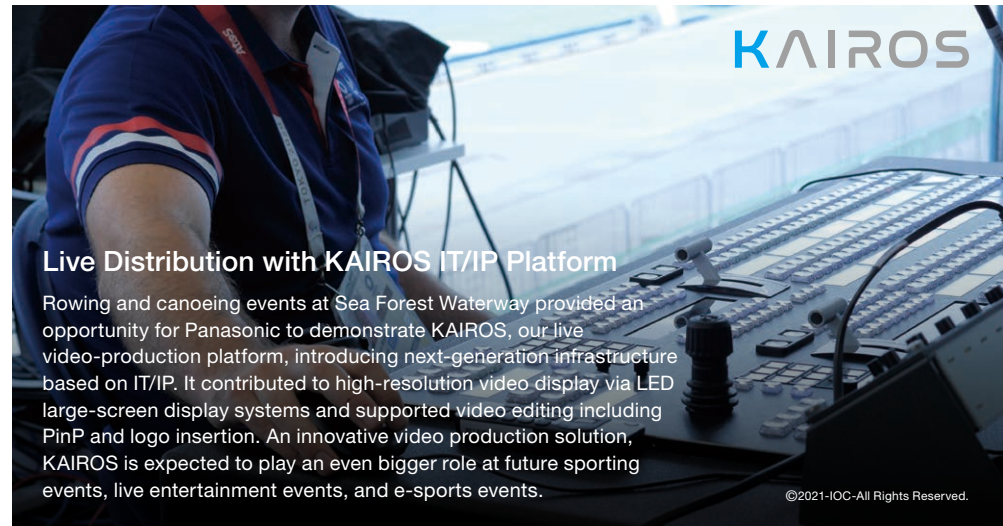
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Live Distribution with KAIROS IT/IP Platform

Rowing and canoeing events at Sea Forest Waterway provided an opportunity for Panasonic to demonstrate KAIROS, our live video-production platform, introducing next-generation infrastructure based on IT/IP. It contributed to high-resolution video display via LED large-screen display systems and supported video editing including PinP and logo insertion. An innovative video production solution, KAIROS is expected to play an even bigger role at future sporting events, live entertainment events, and e-sports events.

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Projectors



Supporting the World's Greatest Sporting Events

Panasonic projectors have been a central to creating spectacular productions at the Olympic Games since London 2012. As part of a larger commitment to Tokyo 2020, we supplied about 60 ultra-high-brightness PT-RQ50K projectors for the Opening and Closing Ceremonies. The world's first 50,000 lm 4K projector*, the PT-RQ50K created the largest projection area ever using fewer units.

* As of October 2021, for projectors weighing 150 kg (330.69 lbs) or less (not including lens), according to internal research. Measurement, measuring conditions, and method of notation all comply with ISO/IEC 21118: 2012 international standards. Value is average of all products when shipped.

Track & Field 100 m Final Olympic Stadium



Sport Climbing Aomi Urban Sports Park



Wrestling Makuhari Messe Hall A



Equipment Introduced

3-Chip DLP™ Projectors

- PT-RQ50K
- PT-RZ31K
- PT-DZ21K

Projector Lenses

- ET-D3LEW200
- ET-D3QT500
- ET-D3QT600
- ET-D3QT700
- ET-D3QT800

Note: lens models listed comprise a selection of all lenses used at the Tokyo 2020 Games.

Displays



Real-Time Event Monitoring

Panasonic provided professional LCD displays to a large number of venues, sharing information with viewers as it happened. Although few spectators were in attendance, the displays played an important role during competition events by allowing athletes, teams, officials, and media to grasp complex situations at a glance thanks to wide viewing angles and high image brightness.

International Broadcasting Centre (IBC) Tokyo Big Sight



Marathon Sapporo Odori Park



Cycling Mountain Bike Izu MTB Course



Equipment Introduced

Outdoor LCD Display

- TH-47LFX60*
- TH-49XF1H*

* Available in Japan only.

4K LCD Display

- TH-98LQ70L

LCD Display

- TH-55VF1H
- TH-55LF80
- TH-49LF80
- TH-70SF2H

Professional Video Systems



Capturing the Passion and Decisive Moments of Competition from Every Angle

In addition to 4K studio cameras, Panasonic's PTZ Camera System played a vital role at Tokyo 2020, capturing footage from exciting new angles. Our provision of video production equipment extended into control rooms, where our live switchers and PTZ camera controllers helped share the action with fans all around the world.

The Opening and Closing Ceremonies Olympic Stadium



Archery Yumenoshima Park Archery Range



Karate Nippon Budokan



Equipment Introduced

IT/IP Platform

- KAIROS

4K Integrated Camera

- AW-UE150W/K
- AW-UE70W/K

Full HD Outdoor Integrated Camera

- AW-HR140

4K Studio Camera

- AK-UC4000
- AK-UC3300

5.7K Compact Cinema Camera

- AU-EVA1

4K Live Switcher

- AV-UHS500

Remote Camera Controller

- AW-RP150G
- AW-RP60G
- AW-RP50

Professional Audio Systems



Dynamic Sound Elevates Excitement

Panasonic's large-venue audio solutions create new production possibilities in a fusion of sound and sport. Large RAMSA line-array speakers installed at about 42 sites distributed deep, clear sound to every corner of every venue, with their power coming to the fore at events such as the Opening Ceremony and skateboarding, where music played a central role in building excitement.

The Opening and Closing Ceremonies

Olympic Stadium



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Gymnastics

Ariake Gymnastics Centre



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Skateboarding

Ariake Urban Sports Park



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Equipment Introduced

RAMSA Line-Array Speakers

- WS-LA4WP
- WS-LA500AWP

Subwoofer for Line-Array Speakers

- WS-LA550AWP

2-Way Bass-Reflex Speakers

- WS-AR200

RAMSA All-Weather Speakers

- WS-LB311

Digital Power Amplifier

- WP-DM912/DM948

Audio-Visual Security Equipment



Largest Security System Ever at the Olympic Games

With event and support venues scattered throughout Japan, Panasonic created an integrated security system including about 8,000 security cameras* and about 2,500 sensors that covered the Olympic Games security headquarters, security headquarters at all 48 venues, and competition venues and athletes' facilities, enabling rapid and accurate response to any situation. For the first time, security personnel used wearable cameras to provide a detailed understanding of the security situation in real time.

* Approximately 8,000 cameras including about 1,000 cameras already installed at the venue.

24-hour Surveillance at the Olympic and Paralympic Village



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Security Headquarters at 48 Venues



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Support Facilities

Support for Broadcasting Operations

Panasonic provided equipment not only to competition venues, but also to support facilities such as Main Press Centre (MPC) and Technology Operation Centre (TOC). To maintain clear image visibility in these well-lit spaces, Panasonic provided LCD displays with selectable video modes that optimized image visibility according to the usage environment, and high-brightness laser projectors that delivered uniform picture quality under lights. Our display solutions were used continuously around the clock.

Main Press Centre (MPC)



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Technology Operations Centre (TOC)

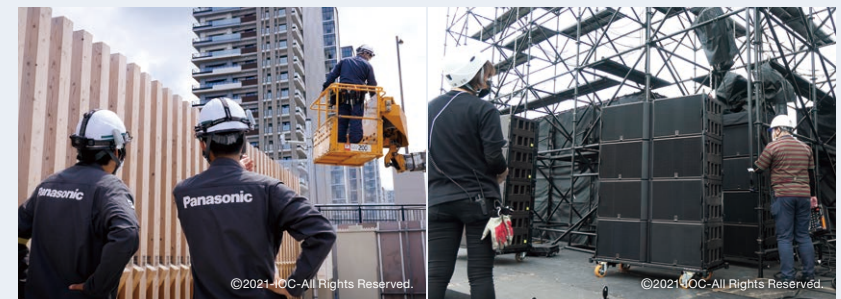


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Field Engineering

Supporting the Success of a Once-in-a-Lifetime Experience

Panasonic provided human resources as well as equipment. Experienced staff performed everything from system design and installation through to maintenance and operation, leveraging our knowhow to install systems to deadline and flexibly responding to late venue and layout changes. Our staff worked around the clock to obtain information on issues at venues and the availability of engineers, allowing us to build a rapid on-site support system that contributed to the event's success.



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Equipment Introduced at Tokyo 2020



Projectors
(The Opening and Closing Ceremonies)
Approx. 60 units



Projectors
(Venues & Facilities)
Approx. 28 units



Displays
Approx. 1,400 units*1



Professional Video Systems
Approx. 180 units*2



IT/IP Platform
KAIROS
1 venue



Video Switchers
Approx. 50 units



Video Recording Equipment
Approx. 140 units*3



Professional Audio Systems
Approx. 42 systems



Audio-Visual Security Equipment
Approx. 8,000 units*4



LED Large-Screen Display Systems
80 screens, total 2,117 m²

*1 Including professional displays and broadcast monitors.
*2 Including integrated cameras, camcorders, studio cameras, and switchers.
*3 Including recorder and drive. *4 Including about 1,000 existing cameras.
Note: Products featured here comprise just some of the Panasonic products used at Tokyo 2020 only.
Lineups do not represent the complete Panasonic Connected Solutions product lineup.

Venue Profiles

Venues and Facilities in the Tokyo Metropolitan Area

National Stadium (Olympic Stadium)

Imperial Palace

Nippon Budokan

Japan Olympic Museum

Ariake Tennis Park

Tokyo Aquatics Centre