The Olympic Winter Games PyeongChang 2018 was staged February 9–25, 2018 in PyeongChang, Republic of Korea, under the theme “Passion. Connected.”

Despite frigid conditions at the open-air PyeongChang Olympic Stadium during the Opening Ceremony, Panasonic stepped up with provision, setup, and operation of state-of-the-art audio-visual systems for the event. About 80 of Panasonic’s 30,000-lumen-class laser projectors were installed, immersing a central video and super-high-definition Cliff-side video seamlessly打架 images. Dynamic projection-mapped visuals captivated spectators and TV viewers alike, with high brightness and imaging technologies making the mesmerizing production possible. Fast-moving images flawlessly resolved in bright and vivid color.

In addition to its AV technology, Panasonic provided end-to-end support encompassing broadcast solutions while offering on-site support including installation, production, system operation, and on-site services. Together, challenges were met in partnership with the organizing committee.

<table>
<thead>
<tr>
<th>PANASONIC AUDIO-VISUAL EQUIPMENT DEPLOYED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Projectors</strong></td>
</tr>
<tr>
<td>Total deployment: Approx. 230 projectors</td>
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<tr>
<td>(Including approx. 80 units used for ceremonies)</td>
</tr>
<tr>
<td><strong>Professional Displays</strong></td>
</tr>
<tr>
<td>Approx. 1,000 units</td>
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<tr>
<td><strong>Broadcast and Professional Video Systems</strong></td>
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<tr>
<td>Multi-format Live Switchers: 16 units</td>
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<tr>
<td><strong>Broadcast Cameras</strong></td>
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<tr>
<td>Approx. 50 units</td>
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<tr>
<td><strong>Professional Audio Systems</strong></td>
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<tr>
<td>Deployed in 10 venues</td>
</tr>
</tbody>
</table>

Promoting World Peace Through Sport

Ever since the Olympic Winter Games Calgary 1988, Panasonic has committed to the Olympic Spirit of promoting world peace through sport. As a proud tournament supporter for more than a quarter century, Panasonic actively promotes the Olympic Winter Games. Making a “unified Future,” Panasonic helped bring the excitement of the Olympic Games to the world, uniting people from all cultures and backgrounds in a mutual love of sport.

At the Opening Ceremony of the Olympic Winter Games PyeongChang 2018, Panasonic helped create a vibrant performance with its high-brightness projectors. Not only supplying equipment, Panasonic also contracted experienced teams covering operation and maintenance of equipment to facilitate the event. Panasonic’s LED displays, broadcast systems, and broadcast systems amplified the excitement for athletes and spectators.

Following the Opening Ceremony, IOC (International Olympic Committee) President Thomas Bach of Germany lauded Panasonic for its support of the Olympic Games, saying: “The partnership with Panasonic is an extremely powerful and successful one. Panasonic technology perhaps in spectacle, and can make the world a more visible, more connected world. Panasonic is the best, and a better future with Panasonic is the better, and a bigger world through sport. And on this day, we can together and the Olympic movement to some height.”
Delivering Class-Beating Pictures in Extreme Conditions
Panasonic combated extreme conditions with "cabin" structures built to protect projectors from freezing air, controlling potentially disastrous temperature fluctuations during projection at the Opening Ceremony, Closing Ceremony, and festivities on ice.

Engineered for Seamless Mapping
Projecting images across vast distances from around the pentagonal venue, Panasonic assured the success of each production with a variety of projection patterns under severe usage conditions.

Patrice Bouqueniaux, Technical Director, who managed event production, explains: "We experimented in temperatures of -28°C. To make work a big installation at an outdoor venue work, you need the best of the best. And the way to get the best of the best is to have strong collaboration with qualified engineers, like we had in Rio. We had the same quality and work here in PyeongChang. That helps us realize great performance in extreme weather conditions. They're like the Formula 1 of projectors, you can get that kind of performance 10 for any size, at any kind of event."

CEREMONY
PROJECTION MAPPING

High-resolution, mapped visuals on stage were achieved with a network of about 80 Panasonic PT-RZ31K and PT-RQ32K 30,000-lumen-class projectors. High-brightness SOLID SHINE Laser reduces cabinet size, body weight, and running cost while ensuring stable operation, a crucial factor in extreme temperatures.

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Hyper-realistic mapped visuals on stage were achieved with a network of about 80 Panasonic PT-RZ31K and PT-RQ32K 30,000-lumen-class projectors. High-brightness SOLID SHINE Laser reduces cabinet size, body weight, and running cost while ensuring stable operation, a crucial factor in extreme temperatures.
**OPENING CEREMONY**  
(The Olympic Winter Games PyeongChang 2018)

Panasonic Sets Peace in Motion

The Opening Ceremony, titled “Peace in Motion,” began with the ringing of a nine-meter-high Bell of Peace in the pentagonal PyeongChang Olympic Stadium. Children appeared and took the audience on a journey through the past, present, and future in the Olympic Winter Games PyeongChang 2018 mascot Soohorang’s white tiger. White tigers have long been considered guardian talismans in Korean culture. PT-RZ31K and PT-RQ32K units deployed around the arena brought the creative concept to life, with immense brightness and high resolution giving substance to the awe-inspiring sculptures of light. Every projector worked faultlessly throughout the event as the world looked on at the unfolding spectacle.

**CLOSING CEREMONY**  
(The Olympic Winter Games PyeongChang 2018)

Panasonic Breathes Life Into a Shared Creative Vision

After 17 days of intense competition, the Closing Ceremony told the story of “The Next Wave,” which emphasized the human spirit of perseverance. Another memorable Olympic Winter Games was coming to an end, but the Olympic movement of peace was only beginning. In the Olympic Winter Games PyeongChang and around the world, Panasonic played a crucial role in creating images and lighting effects above the athletes, support staff, volunteers, and TV viewers united in the moment.

**Installed equipment**

- 3-Chip DLP™ Projector
  - PT-RQ32K
  - PT-RZ31K

- 3-Chip DLP™ Projector
  - PT-R032K
  - PT-R231K
PROJECTORS AT COMPETITION VENUES

Stunning visuals at various competition venues were delivered by SOLID SHINE series projectors. Flexible installations, high brightness, and high contrast performance offered by Panasonic 3-Chip DLP™ projectors heightened the excitement with vivid full-color and monochrome images.

Projection mapping with four PT-RZ31K units at the Gangneung Ice Arena.

Fitted with accessories, PT-DZ21K2 units had flexibility to project downwards from frames attached to scaffolding at the Gangneung Curling Centre. This configuration enabled vivid floor projections from a very long throw distance.

With quad-lamp system ensuring effective backup and guaranteed image display together with excellent native contrast and color, the PT-DZ21K2 units turned on its full at the Gangneung Curling Centre.

The PT-DZ21K2 is a de facto large-scale events projector. Its ever-reliable 3-Chip DLP™ PT-DZ21K2 delivers high brightness of 20,000 lm. Easy operability and control of the setup dual projectors to provide projection at the Gangneung Oval.

PROJECTORS AT COMPETITION VENUES

The PT-DZ21K2 is a de facto large-scale events projector. Its ever-reliable 3-Chip DLP™ PT-DZ21K2 delivers high brightness of 20,000 lm. Easy operability and control of the setup dual projectors to provide projection at the Gangneung Oval.

Projected onto a screen, the PT-DZ21K2 units delivered high-quality images.
Events with sub-zero temperatures at the Yongpyong Alpine Centre placed unusually tough demands on the TH-47LFX60, which came through with flying colours.

Panasonic has the edge for outdoor applications as proven by the exemplary performance of its TH-47LFX60 at ski venues including the Alpensia Cross-Country Skiing Centre.

Panasonic's TH-47LFX60 displays information with IPS panel for wide-angle visibility at the Olympic Sliding Centre.

Competition venues at PyeongChang 2018 were expected to be the coldest in the history of Olympic Winter Games. Panasonic supplied its tough TH-47LFX60 all-weather LCD outdoor signage displays along with various indoor displays and monitors, capturing the electric atmosphere together.

PRO DISPLAYS AT COMPETITION VENUES

Competition venues at PyeongChang 2018 were expected to be the coldest in the history of Olympic Winter Games. Panasonic supplied its tough TH-47LFX60 all-weather LCD outdoor signage displays along with various indoor displays and monitors, capturing the electric atmosphere together.

Panasonic's TH-47LFX60 helped keep viewers up-to-date at the Phoenix Snow Park courtesy of Panasonic professional outdoor displays.

Panasonic's TH-47LFX60 at the Alpensia Ski Jumping Centre.

Panasonic's TH-47LFX60 at the Phoenix Snow Park courtesy of Panasonic professional outdoor displays.

Panasonic's TH-47LFX60 at the Alpensia Sliding Centre.
BROADCAST AND PROFESSIONAL VIDEO SYSTEMS AT COMPETITION VENUES

Panasonic has been official supplier of professional video systems since Barcelona 1992. Panasonic’s recording format, equipment, and on-site expertise has made it the foremost choice for Olympic Games organizers for 24 years, with Panasonic’s advanced P2HD broadcasting system most recently introduced at Rio 2016. Further, AV-HS6000, the 2ME Live Switcher AJ-PX5000G is ready to capture historical moments at the Gangneung Curling Centre and other locations for broadcast workflows in the networking age.

Intuitive operation with a variety of professional video systems at the Gangneung Curling Centre facilitate smooth and professional broadcasting.

AJ-PX5000G is ready to capture historical moments at the Gangneung Curling Centre and other locations for broadcast workflows in the networking age.

Intuitive operation with 2ME Live Switcher AV-HS6000.
PROFESSIONAL AUDIO SYSTEMS AT COMPETITION VENUES

The RAMSA audio system was developed specifically for the Olympic Games. Its unique design addresses severe conditions such as strong wind or low temperatures. Whether installed for indoor or outdoor use, the listener is delivered a more uniform sound level than conventional speakers. RAMSA’s next-generation line array speakers, deployed at PyeongChang 2018, improved clarity and higher power, lifting up the excitement at venues including the Alpensia Ski Jumping Centre, Yongpyong Alpine Centre, Gangneung Olympic Park, and in particular Phoenix Snow Park.

John Paul Giancarlo, Associate Director of Games Technology & Energy (IOC), commented: “We had all the extreme sports, such as halfpipe, slopestyle, and ladies at the Phoenix Snow Park, and it’s all-new RAMSA equipment installed there. It’s really a show, and we wanted to create an almost rock n’ roll youth environment. Having Panasonic RAMSA equipment there just gives a fantastical sound and environment for people to take away.”

*International Olympic Committee.
PANASONIC OPERATION SUPPORT

INTERNATIONAL BROADCAST CENTRE (IBC)

IBC served as the base for the press and broadcast media covering PyeongChang 2018. In addition to NHK and other Olympic Broadcasting Services (OBS) collaboration, it made use of PT-DZ21K2 3-Chip DLP™ projectors paired with ET-D75LE95 ultra-short-throw lenses to project pictures taken in a booth onto a large screen to entertain visitors. Panasonic’s Slim-design LF80 professional displays offer clean and simple presentation.

MAIN PRESS CENTRE

Panasonic’s dominance in the creation of seamlessly spectacular yet easy-to-install video walls is on record, yet the company continues to work on improving this offering for even better performance. The Main Operation Centre at PyeongChang 2018 features 15 units of 55-inch 4K displays for video walls, with the new TH-55LFV70 4K professional display chosen for its phenomenal detail and off-axis color accuracy and clear visibility thanks to Full HD IPS panel technology.

OLYMPIC VILLAGE


SLOVENIA HOUSE

Supporting operation for Panasonic’s local team.

OTHERS

TOKYO 2020 JAPAN HOUSE

A MESSAGE OF CHANGE FROM TOKYO 2020

TOKYO 2020 JAPAN HOUSE introduced the world to Olympic Games Tokyo 2020 and the attractions of its host city, including Japanese culture, cuisine, and natural beauty. Part of the exhibition will comprise Panasonic LF80 Series displays, while Panasonic PT-DZ21K2 3-Chip DLP™ projectors and projectable PT-DZ13K11 ultra-short throw projectors are expected to interact with the environment in a sustainable way. Panasonic’s Slim-design LF80 professional displays offer clean and simple presentation.

Director General (CEO) of Tokyo 2020 Organizing Committee, Mr. Toshiro Muto, has an even bigger vision for the upcoming event. "Sport has the power to change the world for the better," he says. "We want Tokyo 2020 to be the most innovative and world-changing games ever. We hope that the Olympic and Paralympic Games will offer an opportunity for change, for a future with greater peace and harmony. The best form of transmitting such positive change is through the power of sports in Tokyo and we look forward to welcoming many people from around the globe to the Games to help make the Games a success and be inspired by many aspects of Japanese culture and society."
INSTALLED EQUIPMENT AT PYEONGCHANG 2018

3-Chip DLP™ Projectors (Laser Models)
- PT-RQ32K
- PT-RZ31K
- PT-RZ12K

3-Chip DLP™ Projectors (Lamp Models)
- PT-DZ21K
- PT-DZ13K
- PT-DZ680

4K UHD LCD Displays
- TH-98LF70
- TH-70LF50 (Standard model)
- TH-55LF80/49LF80/42LF80 (Standard)
- TH-55VF1H/55LVF70 (Video Wall)
- TH-47LFX60 (Outdoor Signage)

Ultra-Short-Throw Lenses
- ET-D75LE90/D75LE95

Note: For 3-Chip DLP™ Projectors

1-Chip DLP™ Projector (Lamp Model)
- PT-JW130

Space Player
- ET-D75LE90/D75LE95

Full HD LCD Displays

F2 Memory Card Camera Recorders
- AJ-PX5000G
- AJ-PX800G
- AJ-PX380G
- AG-HMX610
- AU-EVA1

Live Switchers
- AV-HS6000
- AV-HS450
- AG-HPD24

P2 Memory Card Portable Recorder
- TH-70LF50  (Standard model)
- TH-55VF1H/55LVF70  (Video Wall)
- TH-47LFX60  (Outdoor Signage)

Cinema Camera
- TH-55LF80/49LF80/42LF80  (Standard)
- TH-55VF1H/55LVF70  (Video Wall)
- TH-47LFX60  (Outdoor Signage)

Speakers
- TH-70LF50  (Standard model)
- TH-55VF1H/55LVF70  (Video Wall)
- TH-47LFX60  (Outdoor Signage)

Note: Products featured here comprise just some of the Panasonic products used at PyeongChang 2018 only. Lineups do not represent the full Panasonic Audio-Visual Systems.

Note: SF2H Series successor model also available.

* The availability of RAMSA varies depending on the country.

TH-98LF70

Note: TH90 Series successor model also available.