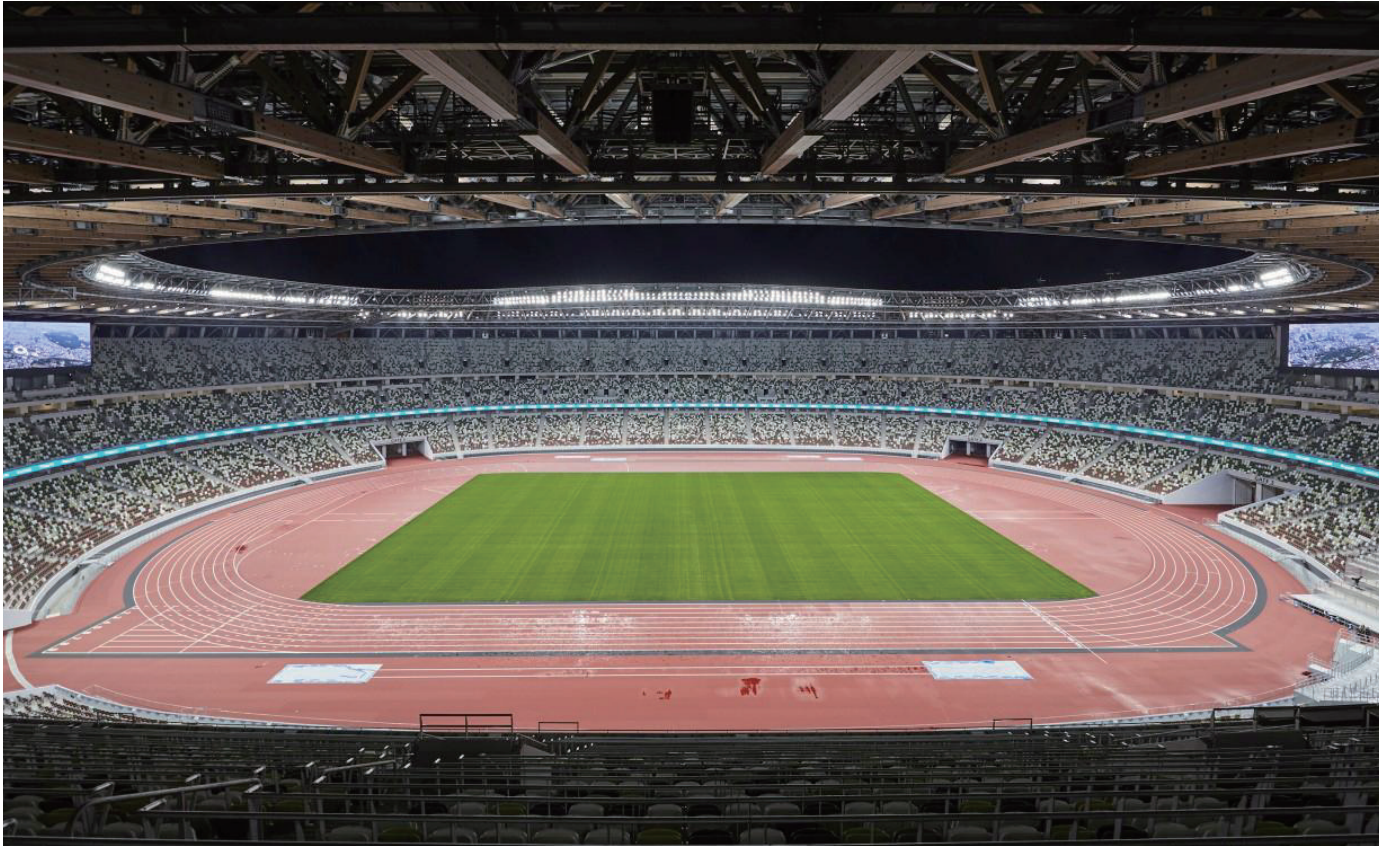


# Japan National Stadium

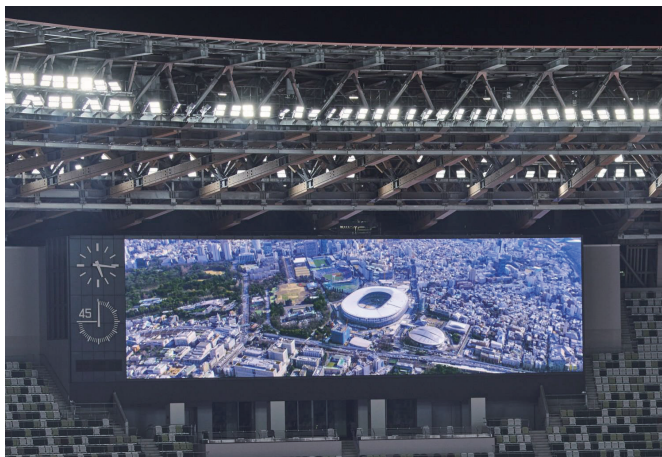
Tokyo, Japan



## Lighting, audio, and video solutions that bring excitement and inspiration to watching competitive sports

On November 30, 2019, construction was completed on the Japan National Stadium, whose design theme of typically Japanese nature was based on the concept of a “forest stadium.” In order to maximize the impact of spectating, the stadium is operated with the help of an array of state-of-the-art technologies, including lighting equipment that is integral to the stands (approximately 1,300 units for the field of play and 200 units for spectators), giant video screens, audio systems, and digital signage displays. Stadium Beam LED floodlights emit the ideal light for color reproduction in 4K/8K Ultra HD broadcasting, achieving an average color rendering index (CRI) of Ra90 and a special CRI of R980. These floodlights are equipped with technology that suppresses flicker even when displaying images at high speeds for super-slow motion photography, and support high-quality video reproduction for 4K and 8K broadcasting. In addition, Panasonic’s unique light distribution design technology provides optimal narrowing of the beams emitted by light sources, thereby reducing glare. The inside of the stadium is lit in a way that gives athletes clearer visibility and makes it easier for spectators to see the action in sporting events. Two large-scale video screens installed on the north and south sides of spectator seating give clear views of historic and record-breaking moments, while Panasonic’s line array speakers envelop the stadium in a veritable waterfall of sound. The areas used by spectators are fitted with approximately 600 digital signage systems, which is more than any other stadium in Japan.\* In this way, information is efficiently communicated to spectators. These technologies are expected to enhance the appeal of sporting events, generate surprise and emotion, and provide the stadium with a sense of security as a public space.

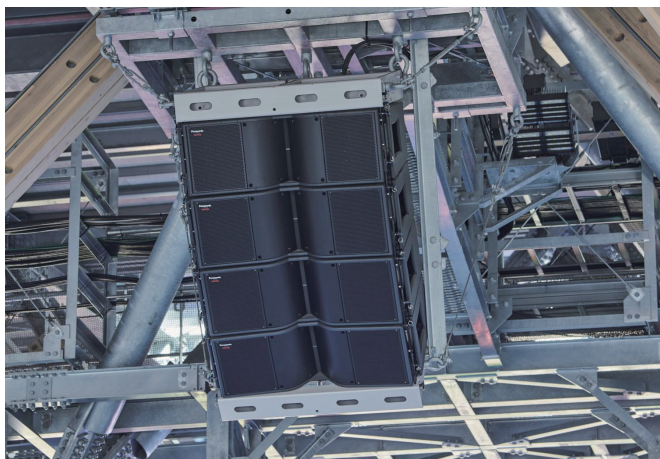
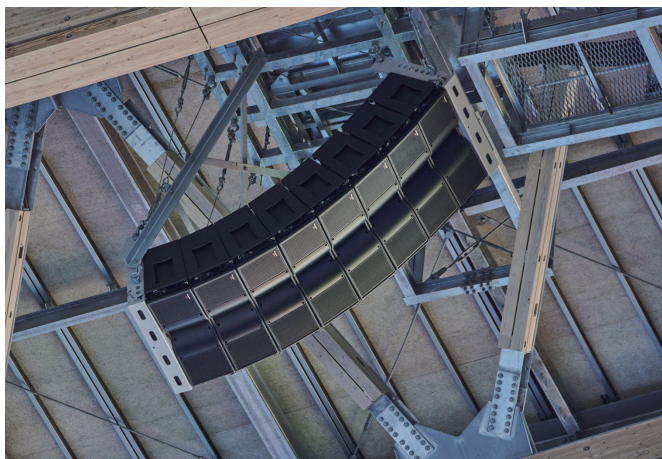
\*As of January 7, 2020 according to Panasonic research.



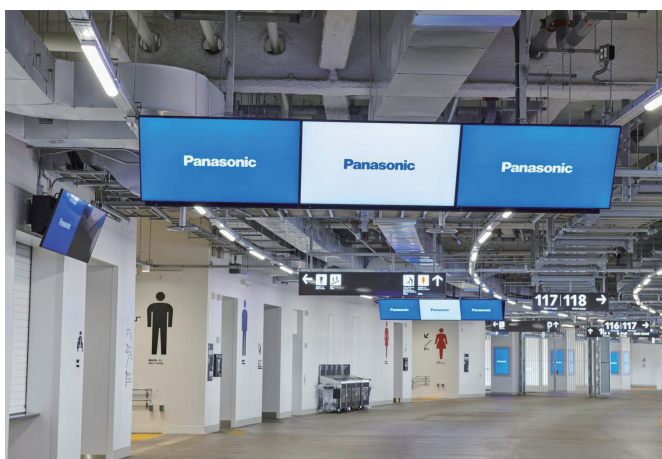
Giant video screen of approximately 9 m × 36 m (including 4 m on the left-hand side for the clock, 45-minute timer, and running timer).



LED floodlights use light sources that accommodate color reproducibility in shooting for TV.



24 sets of eight line array speakers and 14 sets of four line array speakers deliver clear, uniform sound. Pictured are a set of eight line array speakers (left) and a set of four line array speakers (right).

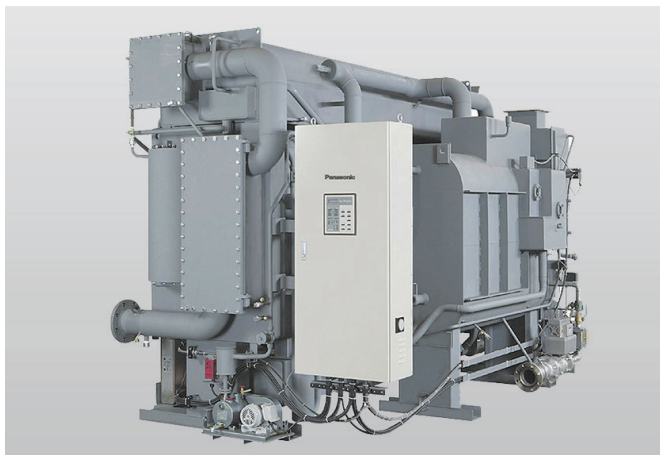


Panasonic's AcroSign® digital signage efficiently provides a variety of information within the stadium. Display content can be switched for each area of the concourse.



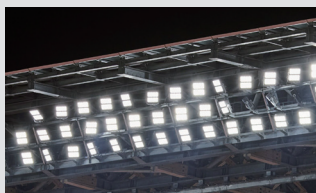


Gas heat pump air conditioner (GHP)  
Excel Plus Series

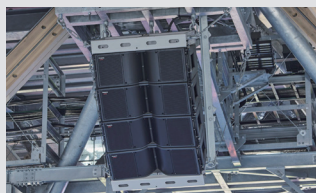


Absorption chiller utilizing natural refrigerants  
(natural chiller)

### Products for Solutions



LED floodlights



Line array speakers  
(audio for sporting events)



Large-screen video displays



Digital signage



Gas heat pump air conditioners



Absorption chillers

