

# ETA ENTERTAINMENT TECHNOLOGY ASIA

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**MAY 2022**

## **Creative Technology Middle East Impresses the World Through EXPO 2020**

**LED VIDEOWALLS - TRESTLING  
THE CONVERGENCE OF CONTENT  
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**ALEX COLUMN: BACK TO BASIC,  
THE MIC PREAMP**

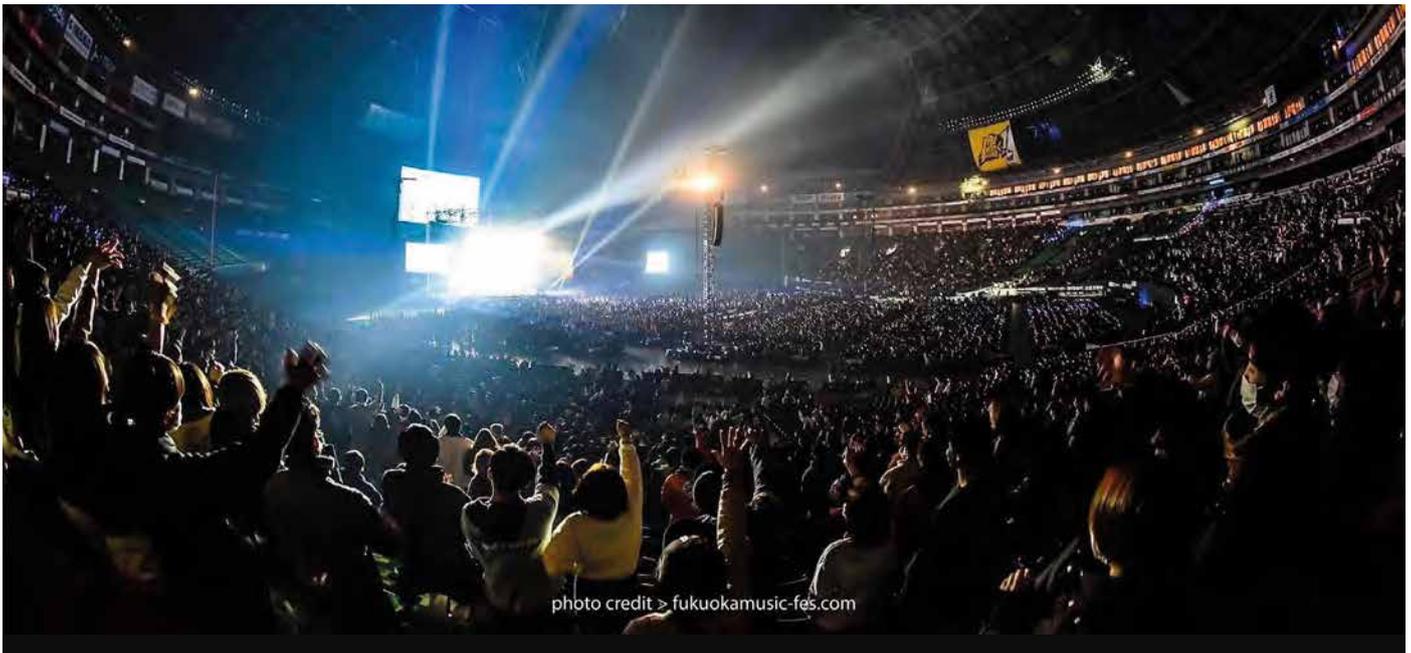
**REYNOLD'S REINFORCES  
TWO OF BANGALORE'S MOST  
MEMORABLE POST-PANDEMIC  
LIVE CONCERTS**

**W W W . E - T E C H A S I A . C O M**

## JAPAN

# Outline Dominates the Dome

*GTO and Butterfly overcome acoustic problems at Fukuoka PayPay Dome*



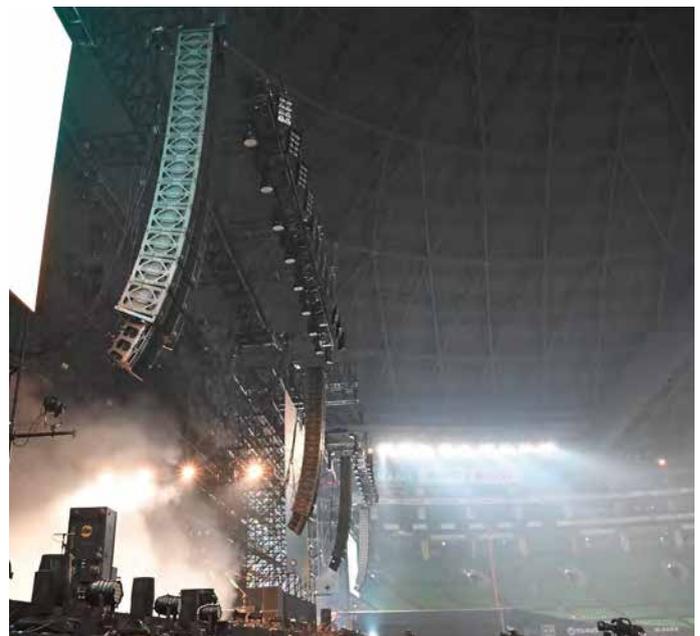
Standing on the shores of Hakata Bay, the Japanese city of Fukuoka is the country's sixth-largest city and second-largest port. As a centre for international commerce, the city plays host to the 52,000-capacity Fukuoka PayPay Dome, the first multi-purpose dome in Japan to incorporate a retractable roof. At a length of 188 m (over 617 ft), the venue also has the world's longest bar from which spectators can see the entire field.

As well as baseball (the Dome is home to the SoftBank Hawks), other key sports events are staged regularly, and concerts have included high-calibre artists such as Michael Jackson, Whitney Houston, Madonna, The Rolling Stones, and Bon Jovi.

One of the most recent music events staged at the huge venue was the Fukuoka Music Fes., organised by Softbank Hawks, Space Shower TV, and apparel manufacturers BEAMS.

On this occasion, the total array of Outline loudspeakers fielded by the event's audio contractor Try Audio Japan

was impressive: each of the two adjacent stages had a main left and right hang, with 12 x GTO and 3 x Mantas as downfills, and outer side hangs had 24 x Outline Butterfly per side.



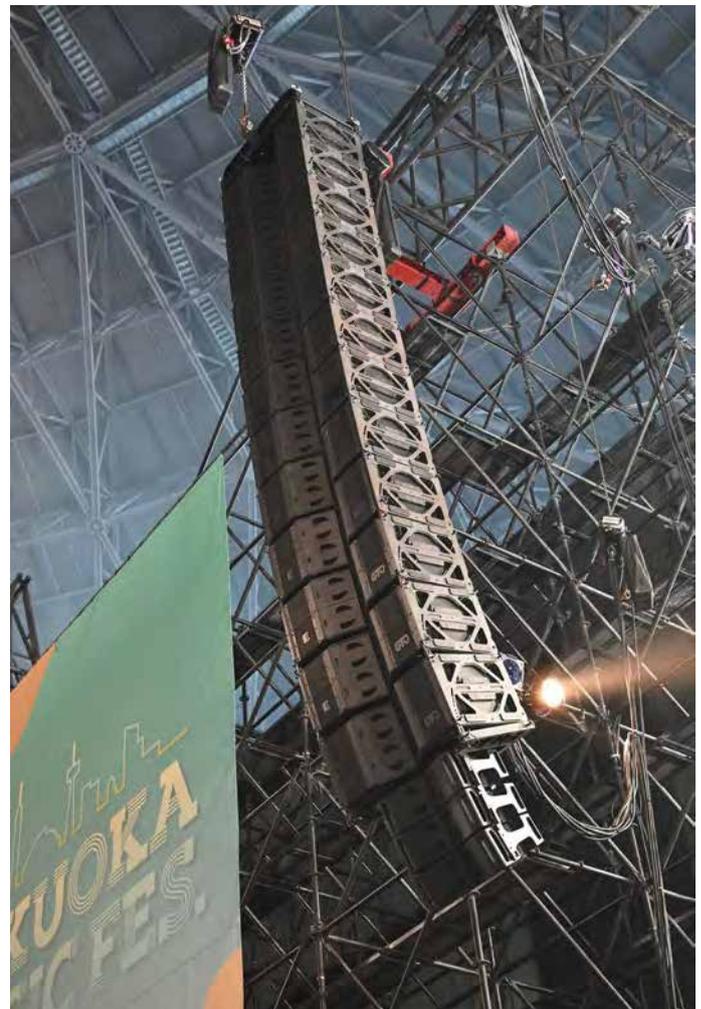


Each of the delay towers hosted 16 x Outline Butterfly elements and 8 x LIPF-082 lip fill speakers were mounted atop the 40 x DBS 18-2 subwoofers, aligned two-up along the stage fronts, which ensured a really beefy punch on the bottom end.

The Outline powerhouse featured T-Eleven, T-Seven, and T-Five power amplifiers. FOH consoles at bands' engineers' disposal were a pair of DiGiCo Quantum 7, a DiGiCo SD8, and an SSL SiX, while monitor land hosted 2 x Yamaha CL5 and a Midas PRO1

Tokihiko "Toku" Tokuda, Try Audio's System Engineer for the event explained the choice of speakers: "The venue has a very long reverberation time - 8 seconds at around 40 Hz - which could lead to a muddy mix. I believed that these speakers could deliver unbeatable clarity in this sort of environment, and we continue to choose this system because it has been well-received by clients at other reverberant venues."

Since reverb time was so long, raising the entire system's volume would have created areas of reduced intelligibility, so Tokuda needed to increase clarity and therefore put a lot of time into calculating the exact position and distance of the delay speakers. Since the



venue's reverb was at very low frequencies, he used Outline's OpenArray 3D software to simulate even the lowest frequencies.

Regarding other positive aspects of the Fukuoka Music Fes., the system engineers had no doubts, "I think the Outline system created an environment that was easy to mix and, even though the bands' engineers had little time to check it. They all found the set-up so easy to tune and so smooth that we were able to proceed right on schedule with the program, thanks also to the two stages set up side by side, on which the event's eleven bands alternated. In fact, after the event, enthusiastic satisfaction was expressed with the results achieved by all concerned."

#### Outline