

# **INTRO**

Modern sound reinforcement solutions are based upon multi-functional, multi-domain integration and networking concepts. From the parking lots to the VIP suites, from the concourses to the front-of-house system, professional sound is delivered with maximum intelligibility and clarity.

The ideals of Bosch, Dynacord and Electro-Voice are to provide solutions for small, medium and large system applications. With regard to audio quality and intuitive operation, we also utilize our OMNEO media networking architecture. This architecture is built upon open public standards supporting today's protocols like Dante audio networking and AES70 control. It is future proof for new norms, and with its additional functions it provides the highest levels of system reliability and redundancy. It provides the platform for our Professional Sound as well as for our certified public address and voice evacuation systems for fully comprehensive and customer focused solutions.

Our team of experienced application engineers around the world is ready to support our clients in the selection, design and implementation of our products in their sports venue projects. These solutions are based upon extensive experience, while helping to ensure an optimal total cost of ownership and utilizing our environmentally friendly product portfolio.

Oliver Sahm, Director of Application Support

# PRODUCT CATALOG



# **Electro-Voice**

From historical performing arts centers to the largest sports arenas to the corner pub, we offer an extensive installation portfolio to craft the right sound system for your venue. Our installation loudspeakers are acoustically and aesthetically matched, so whatever combination of products you select, your system looks as good as it sounds - blending into the architecture while filling the room with superior audio quality.





Line arrays

Horn-loaded point source speakers









Fronted-loaded point source speakers

**Commercial speakers** 

**Subwoofers** 

Microphones



# **DYNACORD**

For over 70 years, Dynacord has designed and engineered professional audio electronics — products that offer unparalleled performance and premium quality, the perfect balance of power and precision.







**Amplifiers** 

**Digital audio matrices** 

**Mixers** 

# SOFTWARE AND DESIGN TOOLS



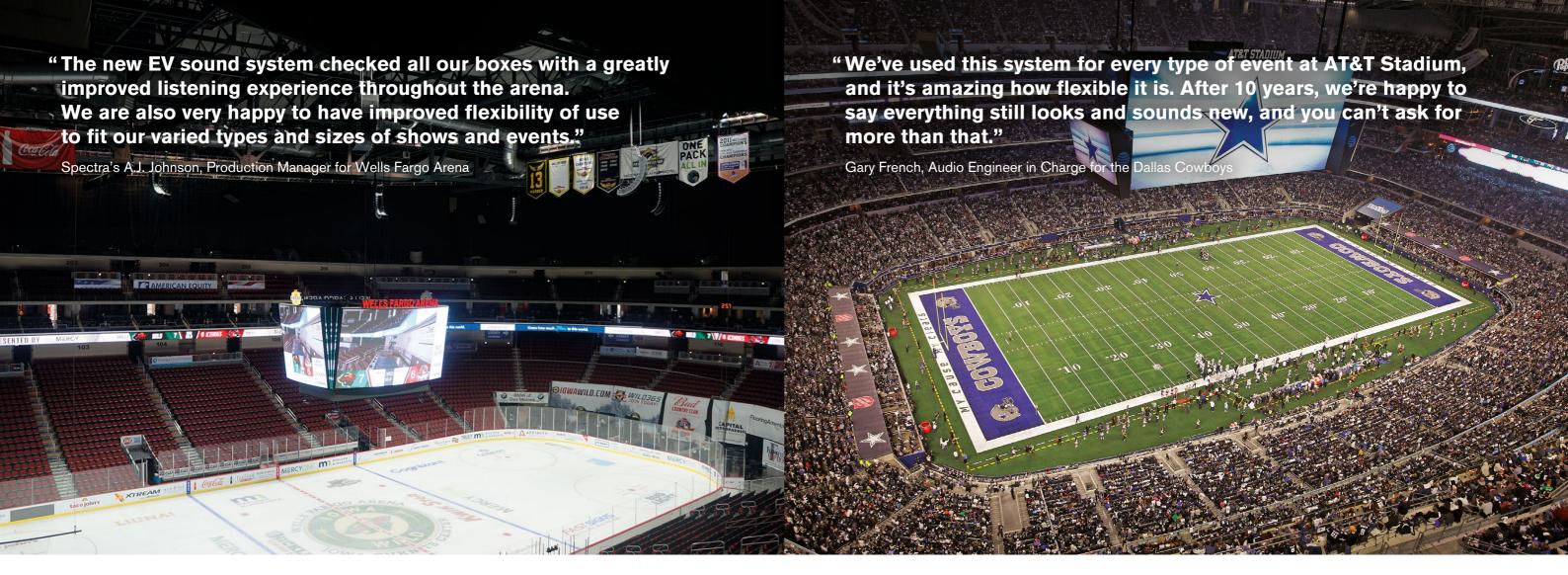
- PREVIEW Loudspeaker Software is a tool to configure Electro-Voice loudspeaker systems for the desired coverage in any venue
- Full-color 3D interface helps specifiers, designers, and audio engineers to guickly find the optimum configuration and position of loudspeakers, amplifier drive and delay requirements, and more
- For line-array designs, PREVIEW will only allow mechanically valid combinations of cabinets and rigging hardware, depending on the selected safety factor
- Data export feature allows users to import PREVIEW designs into Dynacord's SONICUE Sound System Software



- SONICUE Sound System Software simplifies the set-up, tuning and operation of professional sound reinforcement systems
- Intuitive operation and direct interaction are ensured by a comprehensive overview of the entire sound system
- Guided workflows offer maximum flexibility to save time and achieve the best results with minimum effort
- Peace of mind with integrated system visibility, immediate parameter access on the fly, and error prevention through automated configuration checks







# WELLS FARGO ARENA

# **Des Moines, Iowa USA**

MULTI-PURPOSE ARENA - 16,980 SEATS

#### Main system equipment

XLD line-array loudspeakers

EVH-D series horn-loaded loudspeakers

EVID-S compact surface-mount loudspeakers

IPX series amplifiers

### System summary

To tame the acoustic challenges of this asymmetric venue, the integrator built a system around Electro-Voice XLD line arrays, which incorporate a unique approach to horizontal steering. The entire system is powered by Dynacord IPX series multi-channel DSP networked amplifiers with Dante and OCA networking for audio redundancy, remote monitoring and remote control. The end result is a system that accurately reproduces music and the voice of the announcer – as captured by an Electro-Voice RE20 microphone.



# AT&T STADIUM

# **Dallas, Texas USA**

MULTI-PURPOSE ARENA – 80,000 SEATS, EXPANDABLE TO A TOTAL CAPACITY OF 105,000

# Main system equipment

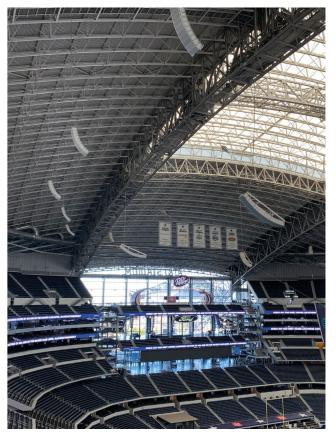
X-Line line-array loudspeakers

XLCi line-array loudspeakers

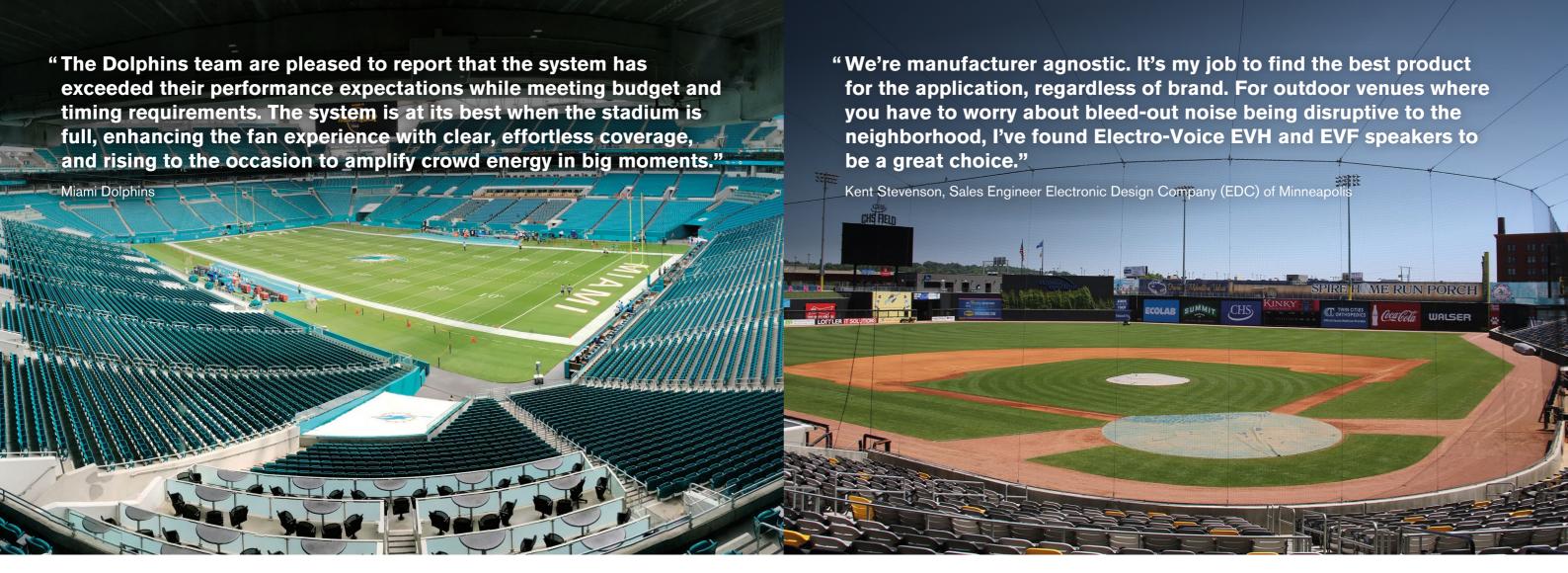
IPX series amplifiers

### System summary

It takes a powerful yet nuanced system to deliver great sound to every corner of the world's largest covered stadium, which is why the home of the Dallas Cowboys chose EV line arrays and Dynacord-engineered amplifiers and system controllers. A major upgrade that expanded the number of line-array cabinets in the upper levels was completed in 2019.







# HARD ROCK STADIUM

# Miami, Florida USA

MULTI-PURPOSE ARENA - 74,767 SEATS

### Main system equipment

XLCi line-array loudspeakers

EVF-S series front-loaded loudspeakers

EVH-D series horn-loaded loudspeakers

ZX1i compact surface-mount loudspeakers

EVID ceiling loudspeakers

NetMax N8000 system controller

### **System summary**

More than 3000 EV loudspeakers ensure that this stadium lives up to its name! To keep the main bowl rocking, XLCi line arrays are matched with X-Line Advance Install dual-18" subs. EV sound provides seamless coverage to all seating areas, concourses, offices and public areas.



# **CHS FIELD**

# Saint Paul, Minnesota USA

BASEBALL PARK - 7,210 SEATS

# Main system equipment

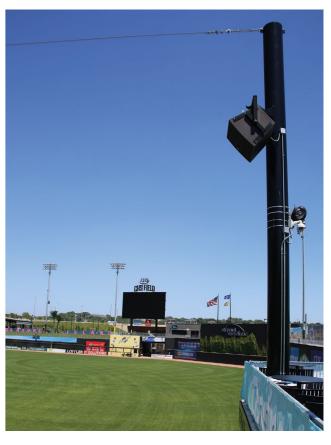
EVF-S series front-loaded loudspeakers

EVH-S series horn-loaded loudspeakers

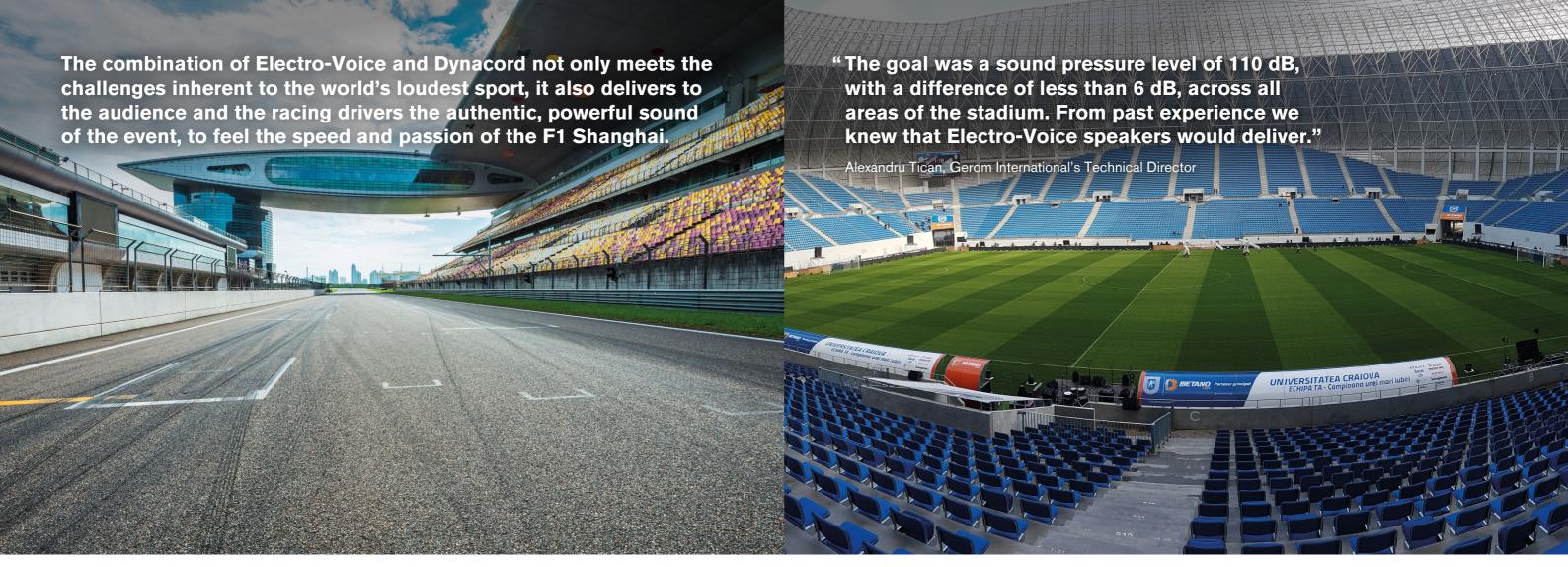
EVID series ceiling and compact surface-mount loudspeakers

#### System summary

EVH horn-loaded loudspeakers mounted on the light poles cover the entire field, augmented by EVF and EVID fills in the main seating areas. EVID 6.2 loudspeakers bring sound to spectators seated on the lawn beyond the far side of the outfield.







# SHANGHAI INTERNATIONAL CIRCUIT

Shanghai, China

MOTORSPORT CIRCUIT - 200,000 SEATS

### Main system equipment

EVH-D series horn-loaded loudspeakers

IPX series amplifiers

#### **System summary**

To cut through the extremely loud roar of the racetrack with powerful, clear audio quality, the main grandstand's loudspeakers were upgraded to Electro-Voice EVH models. Arrays of EVH two-way horn-loaded loudspeakers, powered by Dynacord IPX series multi-channel DSP amplifiers, provide seamless coverage and high intelligibility – even in reverberant areas – effectively solving the sound reinforcement challenges posed by such events as F1 races.



# ION-OBLEMENCO STADIUM

Craiova, Romania

SOCCER STADIUM - 30,983 SEATS

### Main system equipment

EVH-D series horn-loaded loudspeakers

CPS series amplifiers

Dx46 system controller

#### System summary

Stadionul Ion Oblemenco in the Romanian city of Craiova boasts a comprehensive Electro-Voice sound system. EVH-1152D 15" two-way horn-loaded loudspeakers are the perfect choice to ensure consistent sound quality and seamless coverage across every seat.





# **OLYMPIC STADIUM**

**Berlin, Germany** 

MULTI-PURPOSE STADIUM - 74,475 SEATS

# Main system equipment

XLC-DVX line-array loudspeakers

IPX series amplifiers

# **System summary**

The current sound system in the historic Berlin Olympic Stadium was installed during a complete renovation in 2004. In 2018, the Electro-Voice XLC line arrays were upgraded with DVX components that increase both sound output and intelligibility. Newly installed Dynacord IPX multi-channel DSP amplifiers with Eco Rail Technology greatly reduce energy consumption and cost. IPX amplifiers also make it possible to implement redundant Dante audio networks.





# **CELTIC PARK**

# Glasgow, Scotland

SOCCER STADIUM - 60,411 SEATS

### Main system equipment

EVH-D series horn-loaded loudspeakers

EVF-S series front-loaded loudspeakers

#### System summary

Electro-Voice EVF and EVH loudspeakers aimed at the areas above the seats improve coverage, clarity and fidelity within the main bowl of the stadium. The Electro-Voice loudspeakers are amplified, monitored and controlled remotely with Dynacord-engineered matrix controllers and amplifiers. The integration of the front-of-house system with a Bosch voice-alarm system represents a commitment to both comfort and safety.



# MORE REFERENCES FROM AROUND THE WORLD

### TCU SCHOLLMAIER ARENA

#### **USA, Fort Worth**

BASKETBALL ARENA - 8500 SEATS

Read the full story **HERE** 

# SUZHOU OLYMPIC SPORTS **CENTER**

#### China, Suzhou. Jiang Su

MULTI-PURPOSE SPORTS STADIUM -45,000 SEATS

Multi-Purpose Stadium - 13,000 seats

Read the full story **HERE** 

### CADILLAC CENTER

### China, Beijing

BASKETBALL ARENA - 18,000 SEATS

Read the full story **HERE** 

### GRÜNWALDER STADIUM

#### Germany, Munich

SOCCER STADIUM - 15,000 SEATS

Read the full story **HERE** 

# FOSHAN INTERNATIONAL SPORTS & PERFORMANCE CENTER

#### China, Guang Dong

BASKETBALL ARENA - 15,000 SEATS

Read the full story **HERE** 

### TEDDY (KOLLEK) STADIUM

#### Israel, Jerusalem

SOCCER STADIUM - 34,000 SEATS

Read the full story **HERE** 

### KARBALA OLYMPIC STADIUM

#### Iraq, Karbala

SOCCER STADIUM - 30,000 SEATS

Read the full story HERE

#### YI SUN-SIN STADIUM

#### Korea, Asan

MULTI-PURPOSE SPORTS STADIUM -17,376 SEATS

Read the full story **HERE** 

See the latest references on our websites electrovoice.com and dynacord.com

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