
LiveLED
CRYSTAPLEX®
athletica
MONETIZE YOUR BOARDS
ENERGIZE YOUR FANS

Athletica: The Professional Standard for Field-of-Play Infrastructure

Athletica delivers the **industry's most trusted field-of-play dasher board systems,** engineered for safety, performance, and long-term durability. From the dasher boards surrounding the game to the scoring and display systems that power the fan experience, Athletica provides **fully integrated solutions used at the highest levels of sport including the NFL, MLB, NBA, NHL, AHL, and leagues worldwide.**

Why Athletica

- **Proven at the highest level** — trusted in **500+ arenas worldwide,** including **32 venues in the National Hockey League**
- **Engineered for safety** — industry-leading board construction and impact performance designed for elite competition
- **Built to last** — precision manufacturing and durable materials for demanding, high-traffic venues
- **Complete field-of-play expertise** — from **playing surface and dasher boards to scoring, timing, and LiveLED display systems**
- **Designed for new builds and retrofits** with seamless system integration
- **Customized service** — our service teams are staffed with local and regional personnel

From concept to completion **Athletica Sport Systems Inc.** is a full solutions provider for product development.

- In-house R&D and product design capability
- In-house engineering and manufacturing capability
- Worldwide delivery of industry leading products and exceptional service

One partner. One integrated system.

Athletica connects the **field of play, the dasher boards, and the technology that runs the game,** making it the **clear choice for multi-use facilities.**

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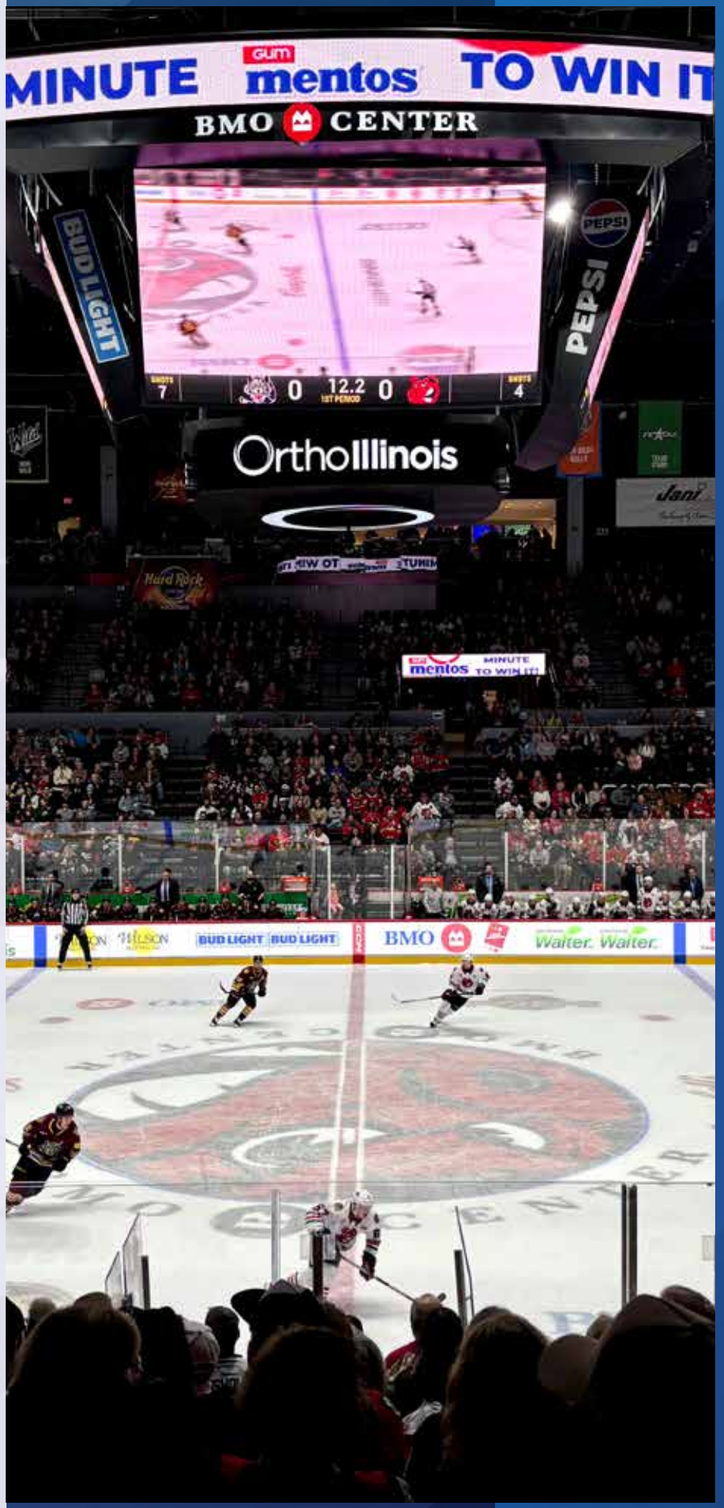

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70
YEARS IN BUSINESS
Delivering industry-leading sports infrastructure solutions since 1956.

150+
EMPLOYEES
A dedicated team of professionals across design, engineering, manufacturing, and service.

32
NHL ARENAS
Trusted in all 32 NHL arenas for Crystaplex® dasher boards and ArenaDeck® ice cover systems.

25+
PATENTS
Over 25 patents and proprietary technologies, setting the standard for innovation in sports infrastructure.

500+
FACILITIES WORLDWIDE
Installed in over 500 arenas, stadiums, and multi-sport venues across North America, Europe, and beyond.

+65%
IMPACT ABSORPTION
Innovating for player safety, with solutions that absorb up to 65% more impact compared to traditional systems.

SAFEST DASHER BOARDS IN THE FIELD OF PLAY

CRYSTAPLEX®

Crystaplex® is the innovator of the following product developments, created to maximize the enjoyment and safety of the great game of hockey for players, coaches, spectators, and facility operators.

Evolution of the Crystaplex® 6A board system.



Crystaplex® 590 Plus
seamless, flexible acrylic shielding

SoftCap®
Flexible cap rail system

GlassFlex®
Allows glass channel to slide back and forth upon impact

CheckFlex®
Dasher board impact absorption

Flush Mount Kick Plate

Crystaplex® Ice Dam
Facilitates quicker conversions

Conversion-Friendly Base

Safety through innovation with a proven track record



Crystaplex® 6A System

As the global dasher board industry leader, Athletica Sport Systems has developed cutting-edge technology to improve player safety, reduce risk and liability for owners and operators of rinks, simplify sports facility operations and to improve spectator experiences including:

SoftCap®

Absorbs 96% more force than standard hard HDPE cap rail systems — a technology that our competitors have failed to produce.

Seamless Acrylic Shielding System

A game-changing, impact-absorbing design using Crystaplex® 590 Plus acrylic—built for quick conversions, player safety, and unbeatable sightlines.

Patented Curved Acrylic Termination™

Impact absorbing NHL approved curved acrylic safety termination.

GlassFlex®, CheckFlex®

Shielding, and boards flex on impact—reducing strain on players during and after collisions.

HDM Divider Sleeves™

Allow for greater flex as they flex with Crystaplex® acrylic.

LiveLED

Ground-breaking technology that allows you to digitize your boards for enhanced fan experience and sponsorship revenue.

The Crystaplex® 6A System is the standard adopted by the NHL, This dasher board system combines unmatched safety features with seamless acrylic for optimal fan and broadcast views. Installed in all 32 NHL arenas and trusted by AHL and NCAA facilities, it delivers a safer environment for all ice sports — from hockey to figure and speed skating.

OES Scoreboards: Certified Excellence

For over 40 years, OES Scoreboards has been creating eye-catching LED video displays and scoreboards that are guaranteed to elevate your entertainment experience. Our unmatched passion and perseverance for excellence is evidenced in thousands of successful installations across North America.

Made using the highest quality LEDs for crystal-clear viewing, our custom displays and scoreboards are created in our state-of-the-art, manufacturing facilities by world class engineering and production teams. We install our products with care both indoors and outdoors, delivering the ultimate customer experience and delighting fans and patrons.

OES Scoreboards delivers

A culture committed to complete customer satisfaction

In-house, world class engineering team dedicated to making superior products

The highest quality LEDs from Nationstar, Cree, and Multicolor

Unmatched passion for improving the entertainment experience

State-of-the-art manufacturing facilities and equipment in North America

Dedicated to delivering the ultimate customer experience


bsi.

Certificate of Registration

QUALITY MANAGEMENT SYSTEM - ISO 9001:2015

This is to certify that: OES Inc.
4056 Blakie Road
London
Ontario
N6L 1P7
Canada

Holds Certificate No: FM 64157

and operates a Quality Management System which complies with the requirements of ISO 9001:2015 for the following scope:

Design and manufacture of electronic products, automotive process monitoring, electronic scoreboards and custom application specific controls.

For and on behalf of BSI: Jessica Patel, Senior Vice President, Assurance Americas

Original Registration Date: 1998-04-03
Latest Revision Date: 2025-08-08

Effective Date: 2025-08-24
Expiry Date: 2028-08-23

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Certificate of Registration

QUALITY MANAGEMENT SYSTEM - ISO 13485:2016

This is to certify that: OES Inc.
4056 Blakie Road
London
Ontario
N6L 1P7
Canada

Holds Certificate Number: MD 812948

and operates a Quality Management System which complies with the requirements of ISO 13485:2016 for the following scope:

Design, Development, Manufacturer of electronic circuit boards and custom application specific controls for the medical device industry.

For and on behalf of BSI: Graeme Turbridge, Senior Vice President Global Regulatory & Quality

Original Registration Date: 2024-12-06
Latest Revision Date: 2024-12-06

Effective Date: 2024-12-06
Expiry Date: 2027-12-05

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Certificate of Registration

ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

This is to certify that: OES Inc.
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London
Ontario
N6L 1P7
Canada

Holds Certificate No: EMS 825804

and operates an Environmental Management System which complies with the requirements of ISO 14001:2015 for the following scope:

The management of environmental risks associated with the design and manufacture of electronic products and scoreboards, automotive process monitoring systems, and custom application specific controls.

For and on behalf of BSI: Jessica Patel, Senior Vice President, Assurance Americas

Original Registration Date: 2026-01-13
Latest Revision Date: 2026-01-13

Effective Date: 2026-01-13
Expiry Date: 2029-01-12

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Vertically Integrated Manufacturer

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Design & Sales
- Engineering layouts
- Needs assessment
- Project manager review
- Technical review
- Renderings
- Custom solutions made for you

Engineering
- Electrical, mechanical and system designs
- Sealed structural drawings
- Professional project management team driving schedules and tasks

Fabrication & Assembly
- The highest standards for electronic manufacturing
- Electronics manufactured and assembled in-house
- State-of-the-art aluminum fabrication facility
- Powder coated enclosures
- ISO 9001 certified technicians
- Custom solutions made for you

Installation
- Decades of combined experience
- Dedicated regional installers for your area trained by OES
- Project management team to support you from installation and beyond

Support
- Committed to lighting up our customers
- Spare parts packages
- Local on-site services
- Remote phone support
- Critical after hours support line
- Optional extended warranty and service contracts

40+
YEARS OF EXPERIENCE
in mission-critical applications.

1000+
INSTALLATIONS
across North America.











Crystaplex® LiveLED Display System

LiveLED System Overview

- Installed directly inside dasher board sections
- Integrates with existing local or cloud-based venue and production CMS platforms
- Enhances fan experience with dynamic game-day presentations and goal celebrations at ice level
- Complements LED ribbons and media cubes throughout the arena

Capabilities

- Real-time content updates
- Replaces static ads with dynamic digital branding
- Increases sponsorship visibility and flexibility

Flexible Installation

- Modular design: single board panel to full 360° arena coverage
- Ideal for both new arena builds and retrofits

INCREASE YOUR REVENUE WITH THE NEXT EVOLUTION IN ARENA-WIDE FAN ENGAGEMENT

Revenue Generation

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LiveLED Dasher Boards create more value than Static Signage

- Dynamic content allows multiple sponsors in rotation
- Motion attracts the eye and increases partner sponsor recall
- Enhanced visibility on broadcasts
- Real-time targeting for different audience segments
- Premium branding potential through animation

Fan Engagement Increases with LiveLED Animation

- Motion drives attention during stoppages
- Enhances excitement with team-branded moments; goal, powerplay, make some noise
- More likely to be captured and shared on social media
- Improves overall in-arena entertainment value

Revenue Potential: Static vs. LED

- LED boards can host 5-10 advertisers per position
- High-attention moments. Opportunity for Full Takeovers
- Repeated impressions significantly boost sponsor ROI

Key Takeaways

- Crystaplex LiveLED transforms 40 static positions into 200+ dynamic sponsor impressions
- Animation boosts engagement, memorability, and broadcast visibility
- Crystaplex LiveLED systems generate substantial additional revenue compared to static signage



Full Arena Integration: The Complete Solution



ISC-9000 customizable controller



ISC-HHX customizable controller



ICS-EDGE customizable controller

LiveLED Dashers

LiveLED In-Ice

Center Hung Displays

Ribbon Displays

Scoring and Timing

Controllers





System Interface

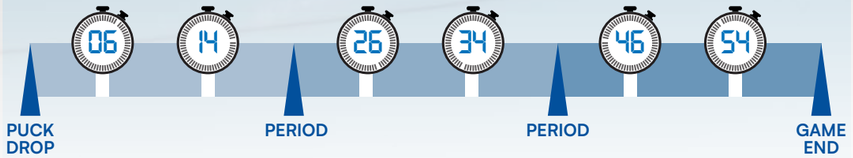
- Seamless integration into your existing CMS
- Ross, Show Control, LiveSync
- Real-time content flexibility
- Content changes on-the-fly
- Unlock new revenue streams
- Immersive sponsor branding across all venue screens and canvasses
- Increase flexibility to add additional premier sponsors AT ANY TIME



Advertising Intervals

Selling by seconds and minutes vs. periods or games

- Dynamic messages maximize stoppages
- Sponsors can own game moments: Power Plays, Penalties, Time outs
- Build category exclusivity takeovers
- Real-time sponsor messaging
- Game-triggered content
- Higher value for sponsors
- Greater retention and recall, drive stronger broadcast integration leading to increased revenue







We Know Conversions

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Built for faster changeovers on a conversion-friendly base

- Lightest LED Dasher Board system in the world
- Quick connections between panels — Mechanical, Digital, and Power Supply
- Built for the busiest buildings: MSG, Crypto.com Arena, Scotiabank Arena
- Faster replacement with ensured accuracy on reinstallation
- Larger panels make for less movement — quicker completion times
- Ease of access for serviceability
- Fewer sections







Evolution of Product Generations

GEN 1 STICKER ADVERTS

Sticker advertisements applied to dashers

GEN 2 ROLLER AD BOXES

Revolving ad panels - scrollable or mechanical motorized boards

GEN 3 DED CABINETS

Advanced virtual advertising technology overlays digitally rendered ads over physical arena boards during live sports broadcasts

GEN 4 12 X 12 MODULES

12” x 12” tiled panels assembled to create sections mounted to dasher board frame

GEN 5 LED CABINETS 2.0

LED panel technology incorporated within the dasher board frame

GEN 6 SMT LED TECHNOLOGY

Surface-mounted LED panels assembled over dasher board frame provides seamless integration edge-to-edge



Technical Specifications

CRYSTAPLEX® LiveLED	P10	P6	P4	P3
Pixel Pitch	10 mm	6 mm	4.81 mm	3.91 mm
Resolution (pixels per m^2)	10,000	25,600	43,264	65,536
Resolution (pixels per meter)	7,900	19,840	34,112	50,688
OPTICAL				
Brightness	≥ 1800 nits			
Color Temperature	2,600 to 9,500 K			
Viewing Angle Horizontal Viewing Angle Vertical	160° 160°			
Optimal Viewing Distance[A]	≥ 110’ [33 m]	≥ 65’ [20 m]	≥ 50’ [15 m]	≥ 40’ [12 m]
Contrast Ratio	5000:1			
Color Range	14 — 16 bit			
Height of Video Screen Area	31” [790 mm]	30.5” [775 mm]	31” [788 mm]	30.4” [773 mm]
Width of Video Screen Area	Minimum 7.9” [200 mm] Extendable to entire perimeter of dasher board system			
Mask Color	Available in both Black and White Mask			
ELECTRICAL				
Power Input	100-240VAC 50-60Hz			
Maximum Power (pixels per m^2)	430 Watts	300 Watts		
Average Power (pixels per m^2)	130 Watts	110 Watts		
Certification	CE, ETL, FCC, RoHS			
GRAPHIC				
Grey Level	14 — 16 bit			
Refresh Rate	≥3,840 Hz			
Frame Rate	Variable 60 - 120 Hz			
Signal Transmission Distance	CAT6E: < 325’ [100m] Multi Mode Fiber: < 1640’ [500m] Single Mode Fiber: < 6.2 miles [10km]			
ENVIRONMENTAL				
Storage Temperature	-4°F to 122°F [-20°C to 50°C]			
Operating Temperature	-4°F to 122°F [-20°C to 50°C]			
Storage Humidity	10% to 85% Relative Humidity			
Operating Humidity	10% to 85% Relative Humidity			
Lifespan (50% brightness)	> 100,000 Hours			
MTBF	> 10,000 Hours			
CONTROL				
LED Processor Type	NovaStar			
Content Management	Can interface with all CMS systems including Ross Xpression, Daktronics Show Control, ANC LiveSync, MotionRocket LaunchPad			

[A] Optimal Viewing Distance is the distance a person with 20/20 vision must move away from an LED display to no longer distinguish individual pixels

Service and Tech support

- ✓ Service and maintenance programs available
- ✓ 24 hour on-site service technician availability
- ✓ 7 days a week technical support hotline
- ✓ Special event support programs
- ✓ 2-year and 5-year warranty options available

LiveLED
CRYSTAPLEX®



SAFETY THROUGH INNOVATION
SINCE 1956

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VANCOUVER • MINNEAPOLIS
LONDON • WATERLOO • HELSINKI

PREFERRED RINK EQUIPMENT SUPPLIER NHL

AMERICAN HOCKEY LEAGUE AHL

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