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CASE STUDY.

AV Projects Celtic FC



Case Study: Celtic FC – Absen A0621 LED Screen Installation

Celtic Football Club, one of Scotland's most iconic football institutions, sought to elevate the matchday experience at Celtic Park by installing state-of-the-art LED screens. As part of this ambitious upgrade, two Absen A0621 LED screens were mounted on the roofs of the East and West Stands, each spanning an impressive 54 square meters. This installation not only enhances visibility for the 60,832-capacity stadium but also delivers vibrant, high-quality visuals to engage fans and showcase dynamic content.

The project reflects Celtic FC's commitment to blending tradition with cutting-edge technology, ensuring that supporters enjoy an immersive and modern viewing experience. The Absen A0621, a robust outdoor LED display from Absen's acclaimed Aurora Series, was selected for its exceptional brightness, durability, and energy efficiency—key factors for a stadium environment exposed to varying weather conditions and demanding long-term performance.

Project Overview

- **Location:** Celtic Park, Glasgow, Scotland
- **Installation Sites:** East Stand Roof and West Stand Roof
- **Screen Model:** Absen A0621 (Aurora Series)
- **Screen Size:** 54 m² per screen (total of 108 m² across both screens)
- **Objective:** Enhance fan experience with high-quality visuals for matchday content, advertisements, and live updates.

The strategic placement of the screens on the East and West Stand Roofs ensures optimal sightlines for fans across the stadium, complementing Celtic Park's reputation as "Paradise" with a modern twist. The installation was designed to integrate seamlessly with the stadium's architecture while meeting the rigorous demands of outdoor use.



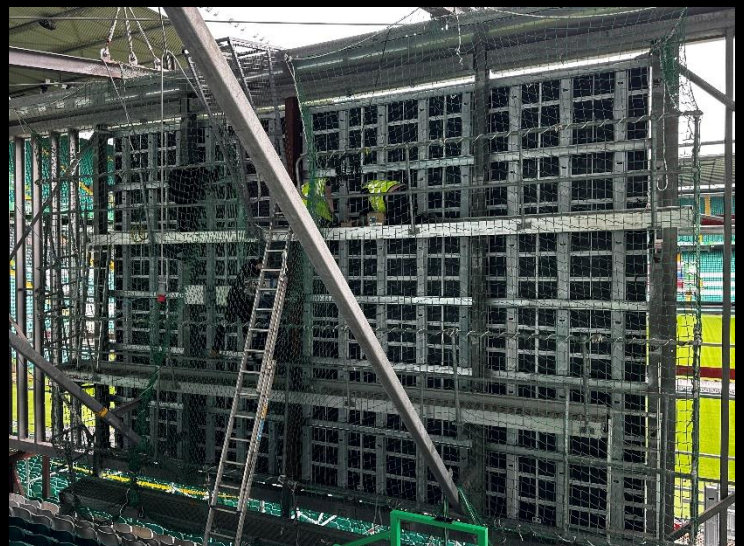
Specification

The Absen A0621 LED screen is engineered for outdoor applications, making it an ideal choice for Celtic FC's needs. Below are the key specifications based on available data for the A0621 model:

- **Pixel Pitch:** 6.66 mm
 - Provides a balance of resolution and viewing distance, with a recommended viewing range starting at approximately 5 meters, suitable for stadium audiences.
- **Brightness:** Up to 10,000 nits (candelas per square meter)
 - Ensures excellent visibility even in direct sunlight, critical for daytime matches and events.
- **Cabinet Size:** 1280 mm x 960 mm
 - Each 54 m² screen comprises approximately 44 cabinets (assuming a standard layout), delivering a seamless and expansive display area.
- **Weight:** 31 kg per cabinet (approximately 25 kg/m²)
 - Lightweight design simplifies installation and reduces structural load on the stand roofs.
- **Power Consumption:** Energy-efficient design with up to 40% reduction compared to previous models
 - Supports sustainability goals while keeping operational costs manageable.
- **Protection:** Waterproof, with an operating temperature range of -40°C to +50°C
 - Built to withstand Scotland's unpredictable weather, ensuring reliability year-round.
- **Maintenance:** Front and rear access for easy servicing
 - Facilitates quick repairs or upgrades without disrupting the stadium's operations.
- **Warranty:** Backed by Absen's 5-year warranty
 - Guarantees long-term performance and peace of mind for the club.

Impact and Benefits

The installation of the two 54 m² Absen A0621 screens has transformed the visual landscape at Celtic Park. Fans now enjoy crystal-clear replays, live statistics, and dynamic advertisements, all presented with stunning clarity thanks to the 10,000-nit brightness and 6.66 mm pixel pitch. The screens' robust construction ensures they perform flawlessly in Glasgow's challenging climate, while their energy-efficient design aligns with modern sustainability standards.



Case Study: LED Signage at Celtic FC for Martyn's Law Compliance

Background

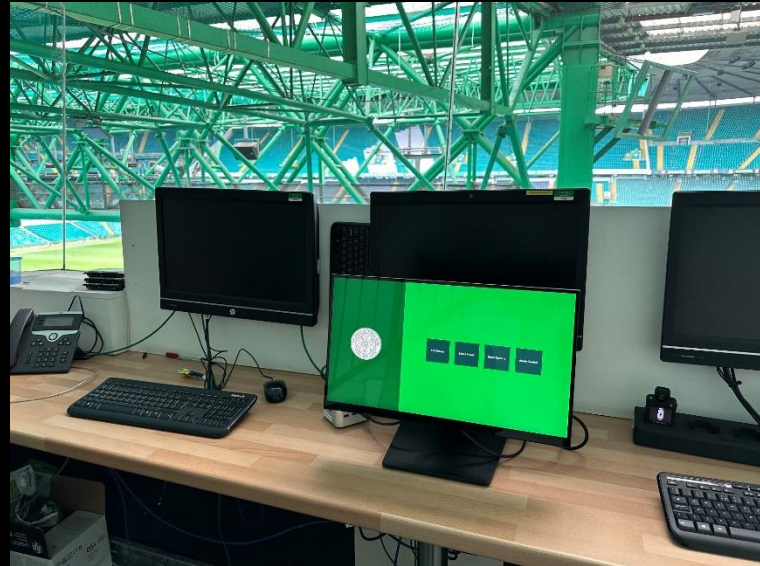
Martyn's Law, named after Martyn Hett, a victim of the 2017 Manchester Arena attack, is proposed UK legislation aimed at enhancing public safety by mandating venues to implement security measures against terrorist threats. For sports venues like Celtic FC's stadium, this includes improving communication systems to deliver timely warnings and instructions to staff, visitors, and emergency responders.

As part of this compliance effort, Celtic FC installed four LED signs in the tunnel area at the rear of the North Stand. These signs are controlled via a user-friendly touchscreen interface located in the police control room, enabling rapid dissemination of warning messages.

Implementation

- **Location:** Four LED signs were strategically placed in the tunnel area behind the North Stand, a key access point likely used by staff, players, and potentially emergency services.
- **Technology:** The LED signs are bright, durable, and capable of displaying clear, concise messages visible in various lighting conditions, making them ideal for high-traffic or emergency scenarios.
- **Control System:** A touchscreen interface in the police control room allows authorised personnel to activate pre-programmed warning messages with a single button press. This simplicity ensures minimal delay during critical situations.
- **Purpose:** The system is designed to provide real-time alerts, such as evacuation instructions, lockdown notices, or safety updates, aligning with Martyn's Law requirements for preparedness and public protection.





Benefits

1. **Speed and Efficiency:** The touchscreen control reduces response time, allowing police or stadium staff to communicate urgent messages instantly.
2. **Clarity:** LED signage ensures messages are legible and attention-grabbing, critical in noisy or chaotic environments like a football stadium.
3. **Compliance:** This setup demonstrates a proactive approach to Martyn's Law, showcasing Celtic FC's commitment to safety and security.
4. **Scalability:** The system could be expanded to other areas of the stadium or integrated with additional technologies (e.g., audio alerts or mobile notifications).

Challenges and Solutions

- **Challenge:** Ensuring staff are trained to use the system effectively under pressure.
 - **Solution:** Regular drills and user-friendly design minimise the learning curve.
- **Challenge:** Potential technical failures (e.g., power outages).
 - **Solution:** Backup power supplies or redundancy measures could be incorporated.

Case Study: Celtic FC Sports bar

"Step into the ultimate sports viewing experience at Celtic the Sports bar, Celtic park Glasgow where cutting-edge technology meets electric atmosphere. The bar boasts an impressive array of 65-inch LG screens lining the external walls, ensuring every angle offers a front-row seat to the action. Nestled within the cozy seating booths, four 55-inch screens provide an intimate yet immersive experience for groups. Overhead, two hanging digital signage screens keep you updated with scores and highlights, while at each end of the bar, towering 75-inch screens in portrait orientation deliver larger-than-life visuals that dominate the space. Complemented by a state-of-the-art Audac sound system, the audio experience is as crisp and powerful as the visuals, making Celtic Sports bar the premier destination for Scottish Football enthusiasts."



Case Study: IPTV System Implementation at Celtic Park, Glasgow

Overview

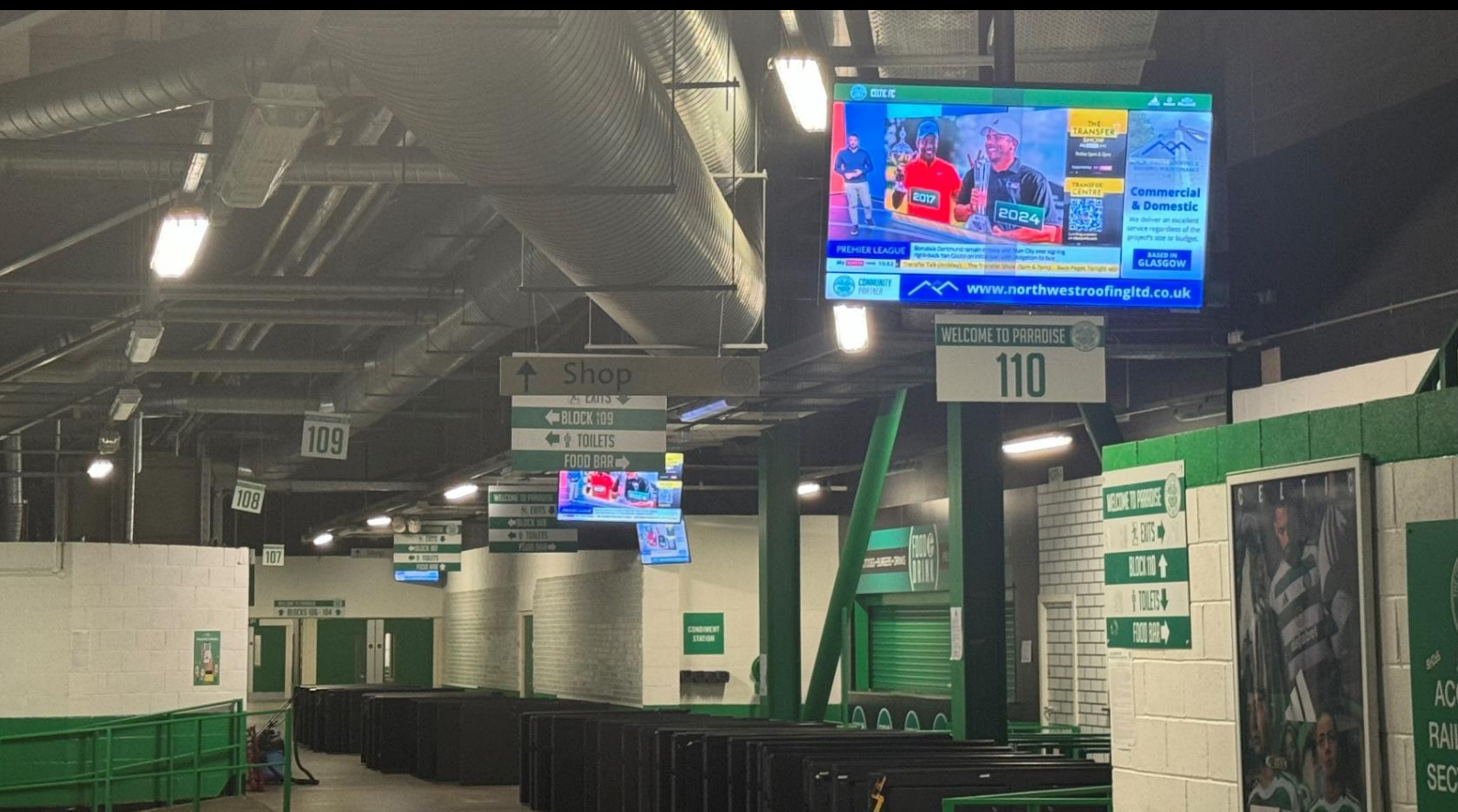
Celtic Park, the iconic home of Celtic Football Club in Glasgow, has implemented a state-of-the-art IPTV system powered by Aura IPTV hardware and platform. This advanced system delivers a seamless entertainment and advertising experience across the stadium and its associated training complexes at Lennoxtown and Barrowfield. With over 250 displays installed across three sites, the system distributes Freeview TV channels, premium sports content from Sky Sports and TNT, Celtic TV match-day broadcasts, and targeted advertising from club partner Eleven Media. This case study explores the deployment, functionality, and benefits of this IPTV solution.

Project Scope

- **Locations:** Celtic Park (stadium concourse and corporate areas), Lennoxtown Training Centre, Barrowfield Training Facility.
- **Total Displays:** 250+ screens, including 65 displays in the Celtic Park concourse.
- **Content Delivered:**
 - Freeview TV channels.
 - Sky Sports and TNT premium sports channels.
 - Celtic TV for match-day coverage.
 - Eleven Media advertising content for club partners.
- **Technology:** Aura IPTV hardware and platform.

Objectives

1. Enhance the fan experience on match days with live TV and club-specific content.
2. Provide corporate areas with premium entertainment and tailored media.
3. Enable dynamic advertising opportunities for club partners via Eleven Media.
4. Ensure seamless content distribution across multiple sites, including training complexes.
5. Deliver a scalable, reliable, and user-friendly IPTV solution.



Implementation

The Aura IPTV system was deployed across Celtic Park and its training facilities to meet the diverse needs of fans, staff, and corporate guests. Key aspects of the implementation include:

- **Hardware Installation:**
 - 65 displays were strategically placed throughout the Celtic Park concourse to maximize visibility and engagement.
 - Over 185 additional displays were installed in corporate areas, Lennoxtown, and Barrowfield, ensuring comprehensive coverage.
- **Content Distribution:**
 - The system integrates Freeview channels with premium sports feeds (Sky Sports, TNT) and Celtic TV, offering a mix of live sports and club-exclusive content.
 - Eleven Media's advertising content is dynamically scheduled and displayed, promoting club partners effectively.
- **Network Infrastructure:**
 - A robust network backbone supports high-quality video streaming across all three sites, minimizing latency and ensuring reliability on match days.
- **Aura IPTV Platform:**
 - The Aura platform provides centralized management, allowing staff to control content scheduling, monitor system performance, and troubleshoot issues remotely.

Challenges

- Coordinating installation across three separate locations with differing layouts and requirements.
- Ensuring uninterrupted streaming during peak usage (e.g., match days with high attendance).
- Balancing entertainment content with advertising to maintain a positive fan experience.

Solutions

- Pre-installation site surveys ensured optimal display placement and network coverage.
- Aura's scalable hardware and redundant systems guaranteed uptime during high-traffic events.
- A flexible content management system allowed seamless transitions between live TV and advertising slots.

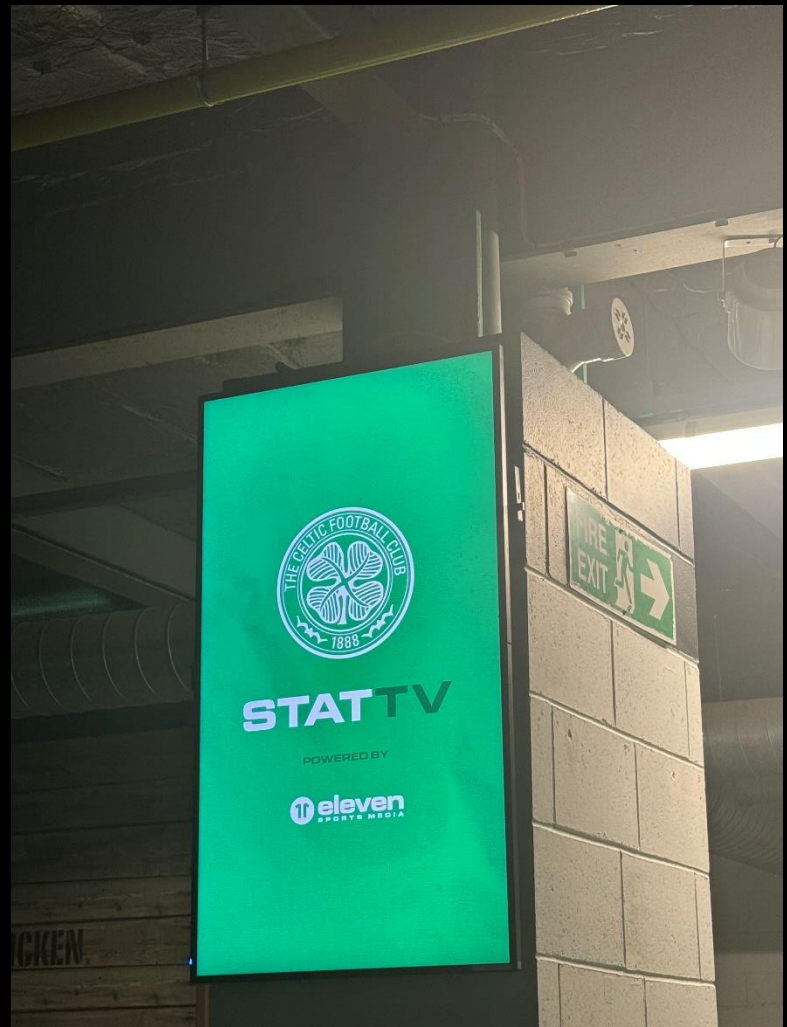
Results

- **Fan Engagement:** The 65 concourse displays at Celtic Park deliver real-time match-day content, keeping fans informed and entertained pre-game, during breaks, and post-match.
- **Corporate Experience:** Over 250 displays across corporate areas and training complexes provide premium sports and Celtic TV access, enhancing the experience for VIPs, staff, and players.
- **Revenue Generation:** Eleven Media's advertising integration has strengthened partnerships and created new monetization opportunities for the club.
- **Operational Efficiency:** The Aura IPTV platform's centralized control has reduced maintenance overhead and improved content delivery speed.

Key Benefits

1. **Scalability:** The system supports future expansion as Celtic FC grows its facilities or display network.
2. **Flexibility:** Aura IPTV accommodates diverse content types, from live sports to targeted ads.
3. **Reliability:** High uptime and quality ensure a professional experience across all sites.
4. **Brand Enhancement:** Celtic TV and partner ads reinforce the club's identity and commercial relationships.

The deployment of the Aura IPTV system at Celtic Park, Lennoxtown, and Barrowfield demonstrates a successful fusion of cutting-edge technology and football culture. By delivering Freeview channels, premium sports, Celtic TV, and Eleven Media advertising to over 250 displays, Celtic FC has elevated the match-day experience for fans, corporate guests, and staff alike. This case study highlights how Aura IPTV's hardware and platform can transform large-scale entertainment and advertising delivery in a world-class sporting venue.



About Us

Interactiv Solutions was formed in 2004 as a full-service systems and media technology integration company, originally addressing the technical needs of the education market with the increase in popularity of interactive whiteboards. As an engineering-centric organization, specialized teams of technical experts partner with clients to design custom solutions that enhance their operations, increase productivity, and help drive Return on Investment.

Now simply known as Interactiv, we continue to grow, supplying blue chip organisations around the UK and Globally and are widely recognized for thought leadership and strategic enterprise implementation. From initial design consultation to deployment to managed services, Interactiv is a trusted technology partner with leading audio and visual manufacturers and partners



Our world is changing at a rapid pace and so is the technology that shares information quickly and creatively using the latest innovation.

At 'Interactiv' we take your ideas and present the latest Audio Visual technology to help make your project a reality - continuously assessing global trends and working with local and international partners to represent emerging innovation - ensuring that our clients have what they need to stay at the top.

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Are You Ready to
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Let's talk

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