

THE LARGEST NETWORKED DIGITAL EWIS INSTALLATION IN THE SOUTHERN HEMISPHERE

## Networked digital EWIS project - The Star

<b>Project:</b>	Networked digital EWIS Design, install and commission
<b>Location:</b>	Sydney
<b>Duration:</b>	Completed 2026
<b>Client:</b>	The Star
<b>Sector:</b>	Entertainment Hospitality
<b>Participants</b>	Precise Air, FireSense, Gloe Fire, WSP, The Star

### Overview

Precise Fire, in partnership with FireSense and Gloe Fire, delivered a landmark multi year upgrade of The Star Sydney’s Emergency Warning and Intercommunication System (EWIS) and Fire Indicator Panels (FIPs).

This project—completed within a live, 24/7 entertainment environment—resulted in the largest networked digital EWIS installation of its kind in the Southern Hemisphere.

### Project background

The Star Sydney required a full transformation of its ageing analogue fire systems to a new, fully digital platform. The upgrade needed to be delivered with zero unplanned outages, despite the site’s continuous operation and heavy public use.

The project partnership included:

- **Precise Fire** – system design, staging strategy, installation leadership
- **FireSense** – manufacturer of the new digital EWIS platform, programming and technical onboarding
- **Gloe Fire** – installation partner delivering cabling, strobes/VAD replacement and fibre backbone works
- **WSP** design consultants
- **The Star** - operations team.

“The collaborative effort uplifted the venue’s life safety infrastructure to meet modern standards, improved operational resilience, and set a new benchmark for digital EWIS deployment in Australia”.

**Geoff Moore**  
General Manager

## Ensuring Continuity on a Live, High Traffic Site

Working within a 24/7 precinct required meticulous staging. Precise Fire coordinated the upgrade over two major stages and five phased sequences, aligned with occupancy patterns and high traffic periods.

To maintain uninterrupted performance:

- Temporary batteries were installed to sustain the legacy EV3000 system during cutover.
- FireSense, Precise Fire and Algotech developed and tested duplicate FIP trips prior to deployment, allowing full verification of activation sequences.
- Extensive testing was conducted at FireSense's Baulkham Hills facility, including panel behaviour, intelligibility, amplifier centre performance, and witness testing with all stakeholders.

This approach ensured seamless system continuity throughout the transition.

## Delivering a Transformational System Upgrade

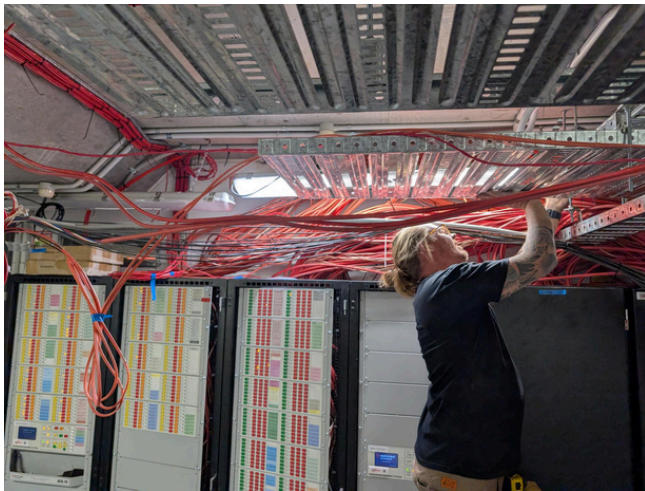
The new FireSense digital EWIS—released only six months prior to deployment—delivered a major technology uplift, meeting AS 1670.4:2018 and introducing modern diagnostics, improved monitoring and enhanced system intelligence.

Key outcomes:

- Installation of a fire rated fibre backbone spanning the entire venue
- Integrated network of 14 panels, including 7 satellite locations
- Replacement of more than 1,500 strobes and VADs
- Reduced impedance and optimised circuit designs
- More efficient future battery sizing and long term reductions in energy consumption

Precise Fire's engineering team reverse engineered and redesigned the venue's Cascade Matrix, developing a modern double knock logic sequence. FireSense programmed this into the new digital platform, improving safety and reducing nuisance alarms.





- Precise Fire’s tailored SWMS, risk assessments and live-site safety controls
- Transparent collaboration between contractor teams, consultants and The Star’s facilities division
- Hand over documentation included cause and effect matrices, evacuation zone maps, FAT/SAT reports and complete operating manuals.

## A Commitment to Sustainability

Sustainability was incorporated through:

- Maximum reuse of compliant cable trays, pathways and infrastructure
- Energy efficient FireSense digital equipment enabling reduced site visits and lower lifecycle consumption
- Upgraded devices enabling more efficient, smaller battery banks in future cycles

A standout sustainability achievement came from Gloe Fire’s circular economy initiative:

- Batteries and cabinets from the decommissioned system were refurbished
- These were reused to power an off grid landscaping nursery
- Paired with solar panels, the system now supports irrigation, lighting and general equipment—eliminating the need for fuel-powered generators

This approach diverted significant waste, extended asset life and created new low-emission utility infrastructure.

## Outcome

Precise Fire and the wider project team delivered a future proof, fully digital EWIS and FIP network while improving safety for thousands of daily visitors and staff and reducing environmental impact and long term lifecycle costs.

This was an industry-leading staging methodology with zero unplanned outages and a benchmark for complex, live site fire system upgrades.

## Innovation in System Design and Live-Site Methodology

The project’s innovation extended across product design, installation methodology and system logic. Key innovations included:

- Largest deployment of FireSense’s new digital EWIS platform
- Fire rated fibre network providing high speed, resilient communication
- Double knock logic and modern Cascade Matrix designed by Precise Fire and implemented by FireSense
- Temporary battery sustainment and duplicate FIP trip testing, creating a seamless cutover approach not previously used at this scale

These combined elements set a new standard for digital EWIS upgrades in large public venues.

## Best Practice Across Governance, Safety and Compliance

The project adhered to strict governance and compliance requirements:

- Full alignment with AS 1670.4:2018
- FireSense’s panels designed and manufactured to Australian standards

