Bedford Electrical

CASE STUDY

PA System Installation for Amazon Delivery Centres

Customer: Amazon

Location: Multi-Zone

Core Service: Mechanical & Electrical

Sector: Transport & Logistics



Project Details

Client Overview

Our client, Amazon, has 66 delivery centres across the UK, allowing parcels and packages to be distributed to their end destination promptly. The objective was to implement control for communication and real-time announcements to all staff members across warehouses.



Project Overview

In 2024, Bedford Electrical successfully installed a **bespoke multi-zone PA system** across 63 out of 66 Amazon Delivery Centres in the UK. The project ensured that the centres continued their daily functions with no interruptions.

This system met the specific needs of each centre. The installation ensured comprehensive sound coverage across varied warehouse sizes, from small facilities to larger, more complex layouts.



System Features

PM1 Cloud Paging Microphones for Real-Time Announcements

The system includes PM1 Cloud Paging Microphones, enabling real-time announcements from centralised locations within the facility. These microphones are easy to use, offering flexibility for operators, and can also be pre-programmed for timed announcements. This functionality ensures that communication can be scheduled or delivered instantly based on operational needs.

Emergency Override for Safety Protocols

The PA system integrates seamlessly with fire evacuation and emergency response systems. In an emergency, the system takes priority control, overriding any set zones to broadcast evacuation messages across the site. This ensures cohesive and effective communication during emergencies to maximise safety for all staff.





System Features, continued

12-Inch AMX Tablet for Enhanced Control

Each system includes a 12-inch AMX tablet, which provides a user-friendly interface to control and customise the PA system.

- 1. Location Flexibility: The tablet can be anywhere to best suit the client's operational needs.
- 2. Real-Time Adjustments: Users can adjust system preferences, such as volume, zone selection, and pre-set announcements, directly from the tablet.
- 3. Comprehensive Training and Support: Prime Atlantic Group offers free training on operating the tablet and system. A dedicated helpline is available to provide assistance and resolve queries at no extra cost.

Multi-Zone Control for Flexible Communication

The bespoke system enables targeted announcements in specific zones within the facility, allowing Amazon to address different areas of operations separately and deliver critical information to the appropriate zones without unnecessary disruption.

This system enhances operational efficiency and ensures that all warehouse staff can hear relevant messages in their designated areas, improving communication and workflow.

System Features, continued

High-Quality Sound Coverage with Efficient Power Use

Each speaker covers a 14-metre radius with central placement to ensure even audio distribution across the facility. The system operates efficiently, further enhancing the cost-effectiveness while maintaining high-quality audio output. This approach reduces energy usage and increases the system's overall return on investment (ROI).

Scalability and Flexibility for Varying Warehouse Sizes

The system is scalable, making it suitable for facilities of any size. Whether a smaller delivery centre or a more complex site, the system can expand or be modified to meet the space's needs. This flexibility ensures that the system remains a future-proof investment for Amazon, capable of adapting as operational demands change.





Cost Efficiency

 The system's efficient power output delivers maximum value with minimal operational costs, contributing to an excellent return on investment (ROI).

Sustainability

 The system consumes low power while delivering high-quality audio, making it one of the most sustainable solutions available, helping Amazon meet its environmental goals while reducing operating costs.

Enhanced Communication and Safety

- The multi-zone capability allows Amazon to manage communication across different warehouse sections, ensuring each department receives the necessary information.
- The integration with safety systems ensures the system takes priority during an emergency and provides clear evacuation instructions across the building.



Key Advantages, continued

User-Friendly Operation and Support

- The 12-inch AMX tablet offers intuitive system control, allowing operators to make real-time adjustments and optimise performance.
- Comprehensive Training and a dedicated helpline ensure that users get supported at every step with quick access to assistance during working hours.

Future-Proof Design

 The system's scalability and flexibility allow it to grow with Amazon's needs, ensuring long-term utility and adaptability as the company expands or adjusts its operations.



Installation Process

Bedford Electrical considered the layout of each location, and detailed site visits ensured precise speaker placements. This detail allowed us to provide optimal sound coverage and avoid interference with other operational systems.

Site Surveys

 Detailed assessments were made of each facility to understand the layout, specific zoning requirements, and potential obstacles.

Tailored Installation

 Each system was customised to meet the unique needs of each site, ensuring that the speakers provided maximum coverage with minimal energy consumption.

Seamless Integration

 The system was integrated with existing Amazon infrastructure, including emergency systems, to ensure the PA system supported overall safety protocols.

Ongoing Maintenance

To maintain the high standards set during the initial installation, Bedford Electrical provides annual maintenance visits to ensure that the PA system continues to perform at its best. These visits include:

System Cleaning:

A thorough cleaning of all components, ensuring there is no build-up of dust or debris which could affect sound quality or system performance.

Calibration and Performance Checks:

Each system is tested to ensure all zones receive the correct audio levels and remain optimised for ongoing operation.

Component Inspection:

We conduct annual comprehensive checks to ensure that components function correctly. As part of the 10-year guarantee service, any necessary adjustments or updates avoid potential issues and maintain system integrity.



Client Satisfaction:

Prime Atlantic Group has delivered a cuttingedge PA system that meets our operational needs while providing exceptional value. The installation was seamless, and we've seen significant improvements in communication and safety across our delivery centres. The system's efficiency and flexibility make it a standout solution for our business.

Amazon Operations Team



Conclusion

Our PA systems have provided Amazon delivery centres in multiple locations across the UK with a highly reliable and cost-effective solution for communication and safety. The efficient design and eco-friendly operation with minimal power consumption delivers substantial value for performance and financial savings.

With zero disruption to operations and an annual maintenance plan ensuring continued quality and performance, this sustainable and reliable system is a prime example of our innovation to improve operational efficiency in large-scale facilities.



Bedford Electrical

Contact Us



Website

www.bedfordelectrical.co.uk



Phone

+ 44 1234 766665



Email

info@bedfordelectrical.group



Social Media

@bedfordelectrical



HQ Address

17 Railton Road, Woburn Road Ind. Estate, Kempston, Bedford MK42 7PW