CASE STUDY



Sound Solutions for a Food Production Facility

Project: Fresh Pak

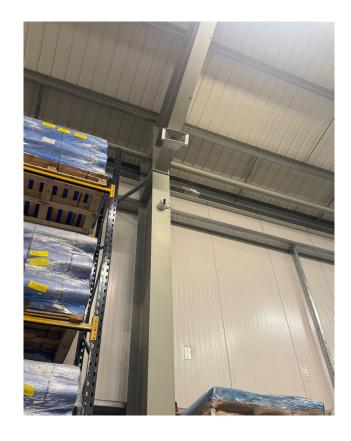
Installer: TBA Security Solutions Ltd

In 2024 the TOA technical team were approached to help design a multi-area public address system for Fresh Pak, a busy food production facility. Using our IP-A1 network Series, an IP networked system was designed to enhance internal communication, improve operational efficiency, and ensure safety across various working zones, including factory floors, offices, warehouses, outdoor areas and staff facilities. Now completed, we asked the installer, TBA Security Solutions, about what the project entailed and if it met the end-user requirements.

With 7 key zones to control, the system had to be flexible to deliver different audio in different areas and, being a factory, at different volume levels.

The main factory production area, with high care and low care zones, needed speakers that could deliver clear and reliable announcements in a production environment. 32 IP-A1SC15 IP Horn Speakers, which are designed for durability and are ideal for use in hygienesensitive high-noise zones, were installed in strategic locations to deliver audio.





The two separate warehouses were each equipped with CS-154 projection speakers with a local A-2120DD amplifier and IP-A1AF IP Audio Interface in each area. Rated to IP65 and with the ability to operate in a wide temperature range (-20 to +55°C) made them ideal for warehouse areas providing localised paging with zone control.

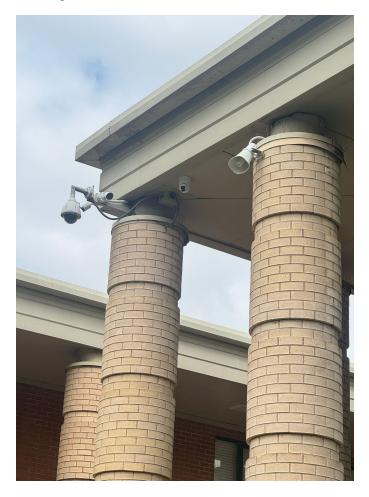
In the two office areas PC-1860 speakers were chosen so that they could be integrated into the ceiling giving a sleek and unobtrusive solution to delivering sound, powered by the IP-A1PA12 IP Amplifier.



In the canteen area we also specified the PC-1860 ceiling speakers again connected to an A-2120DD amplifier with an IP-A1AF IP Audio Interface and IP-A1PG IP Paging Gateway. In addition, this area also had installed the WS-5325H UHF wireless system with WH-4000H headset for local and full-facility broadcasts.



The outdoor area had 3 IP-A1SC15 IP Horn Speakers installed for wide-area audio coverage and paging outside the facility.



And finally, the IP-A1RM IP Remote Microphone was installed in the reception comms room to facilitate the delivery of announcements.



KIT LIST

- PC-1860 Ceiling Speaker
- CS-154 Projection Speaker
- IP-A1SC15 IP Horn Speaker
- IP-A1P12 IP Power Amplifier
- IP-A1AF IP Audio Interface
- IP-A1PG IP Paging Gateway
- IP-A1RM IP Remote Microphone
- A-2120DD Digital Mixer Amplifier
- WS-5325H UHF Headset Wireless System with WH-4000H Microphone.

The end-user had a clear vision of what key benefits they wanted delivered for this project and this was achieved by careful consideration of all areas and the way TOA products are designed to integrate with each other to create the best audio solution.

The design delivered:

- Improved Communication: Reliable announcements across all working environments including production, office, warehouse and canteen.
- Scalability: IP-based system design allows for future expansion or reconfiguration.
- Flexibility: Wireless headset enables mobile and hands-free operation.
- Safety and Compliance: Timely alerts and instructions help ensure workforce safety and operational compliance.

"When it came to the install, the project went smoothly. The products were perfect for the environment as many were installed into high pressure washing open food areas. The installation itself varied from area to area. A lot of the high care areas we had to install out of the production times so we didn't contaminate any of the product. We worked around employees to rotate around the production lines."

Martyn Stringer & Matthew Stringer

Company Director & Marketing, TBA Security Solutions

"Another great project by one of our installers. TOA Technical really thought about how our IP-A1 Series could be used in this facility with so many areas to cover and we are glad the end-user is happy with the outcome and their new system which they will be able to add to in the future."

Ian Bridgewater

Managing Director & Technical Director, TOA Corporation (UK) Ltd



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