



Industry:
Rail infrastructure

Solution:
Public address (PA)

Organization/End User:
West Midlands Trains (WMT)

Country:
United Kingdom

Location:
1 Station

Year of Installation:
2025

System features:
**VAIA-AC, IP interface
with Blackbox**

Customer:
Hitachi Rail

Cannock Station

Serving the town of Cannock and its surrounding communities.

Cannock Becomes First of Many West Midlands Train Stations to Receive Zenitel VAIA Upgrade.

The Customer/End User

West Midlands Trains (WMT) operates passenger rail services across the West Midlands and beyond. The company manages around 146 of the 178 stations in its network and has operated the West Midlands franchise since December 2017. WMT continues to play a vital role in the UK's transport network, focusing on safety, performance, sustainability, and expansion while delivering commuter, regional, and intercity services.

Hitachi Rail, responsible for station communications maintenance across the WMT network, collaborated closely with both WMT and Zenitel on the system design and upgrade methodology. This partnership ensured reliable, integrated communication solutions were delivered efficiently across the network during the accelerated works programme.

Introduction

Located in the heart of Staffordshire, Cannock station serves the town of Cannock and its surrounding communities. Operated by West Midlands Trains, the two-platform station welcomes around 350,000 passengers each year.

As a key part of the Midlands rail network, the station required a modern and dependable public address (PA) system to enhance passenger experience and improve safety. To achieve this, WMT partnered with Hitachi Rail and Zenitel, officially marking Cannock as the first station in the region to benefit from this cutting-edge technology rollout.

The Requirement

Stations across the WMT network featured a variety of amplifier types, leading to inconsistent performance,

reduced sound quality, and maintenance challenges. The project's primary goal was to standardize and modernize the PA systems with a universal, state-of-the-art all-in-one amplifier solution capable of meeting passenger expectations.

Given Cannock's status as an unmanned station, reliability, remote operability, and long-term durability were key priorities. The system needed to be future-proof for at least a decade while offering a low total cost of ownership. Additionally, installation and commissioning had to be completed within a single day to minimize disruption. Compatibility with the existing automated announcement interface and existing speaker lines was essential to ensure seamless rollout and avoid service interruptions.

The Solution

Zenitel's compact and reliable public address systems was purpose-built for smaller stations like Cannock. A single VAIA-AC unit was installed to provide full coverage across both platforms. The VAIA-AC integrates amplification, backup amplification, digital signal processing, AC power, and system control in a compact 1U design, meeting the highest reliability standards.

Built for longevity, the VAIA-AC system is designed for a minimum 10-year lifespan. Rear-mounted screw terminals and an all-in-one architecture simplified installation, reducing both time on-site and preparation. Much of the system configuration and testing was done off-site by Hitachi, enabling a fast, efficient deployment.

To ensure everything ran smoothly on-site, Zenitel collaborated closely with Blackbox, the provider of the station's training and automated announcement system. Prior to installation, all components and integrations were thoroughly tested off-site, culminating in a successful customer-witnessed Factory Acceptance Test (FAT) earlier in the year. The interface operates using Zenitel's VIPA-API and audio platform, ensuring seamless communication and reliable system performance.

The Result

The deployment of Zenitel's VAIA-AC public address system by Hitachi Rail has transformed the audio experience at Cannock station. Announcements are now clearer and more intelligible across both platforms, significantly improving the passenger experience.

The new system also delivers notable energy savings and enables remote control and monitoring, enhancing efficiency throughout its lifecycle and contributing to West Midlands Trains' sustainability objectives.

Remote management is especially beneficial for unmanned stations like Cannock. The integrated IP networking allows for remote monitoring, control, and system management, removing the need for on-site supervision. Built-in redundancy and self-monitoring functions ensure the system remains operational and automatically reports issues, maintaining consistent reliability.

Cannock is the first of 58 stations across the West Midlands Trains network scheduled for a Zenitel PAVA system upgrade by March 2026. The wider three-year programme — covering 140 stations in total — is progressing on schedule.

The success of the Cannock upgrade demonstrates how Zenitel's integrated audio solutions deliver reliable, energy-efficient, and future-ready communication systems for modern transport networks.



"We have worked with Zenitel on numerous projects and have always been impressed by the reliability of their systems and the quality of their service and support."

- Andy Jones, Service Delivery Manager, Hitachi Rail

Why Zenitel?

Zenitel is well positioned to drive the future of intelligent critical communication solutions. Through our portfolio of IP products and solutions, with built-in intelligence and a focus on cybersecurity, we provide organisations with superior, scalable security and flexibility. Zenitel is the proven, preferred choice for environments requiring crystal-clear audio to ensure the protection of human life, property, assets and the management of critical activities. With interoperability at all levels, we seamlessly integrate with access control, video management and security platforms-