PRODUCT SOLUTIONS FOR
INTELLIGENT TRAFFIC SYSTEMS

AGD **650**
DUAL ZONE STOP-LINE DETECTOR

Case Study
Cyclist safety and junction efficiency are priorities for Cardiff detector trial

Utilising a brand-new AGD product solution has enabled a Welsh local authority to reduce needless waits at a busy junction.

When Cardiff Council introduced a number of 'pop-up' cycle lanes, they needed to ensure all junctions where the lanes intersected traffic were safe and efficient for all road users.

So when they found two problems with their existing technology: it wasn't effectively detecting waiting cyclists, and there was no function to cancel demand if a cyclist moved away from the crossing, they sought a new solution provider and turned to AGD for support.

Luckily, the ITS manufacturer had just developed a dual zone stop-line solution, the AGD650, which they believed could improve both issues – and they asked Cardiff traffic engineers to be among the first to trial the 650, to see if the solution could alleviate both concerns at the site.

Ai INSIDE

The 650 has in-built artificial intelligence and makes use of a new neural processing platform and sophisticated algorithms to provide ultra-reliable real-time detection and automated decision making on vehicle types, including bicycles and scooters.

safer, greener, more efficient

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The junction of North Road and Castle Street sees the cycle lane intersecting vehicle traffic, meaning the detector at the site had to be able to effectively identify cyclists on their approach and while waiting at the stop line. Plus, cancel the demand if the cyclist saw there was no traffic approaching, and moved on through the junction without waiting for the red light to be triggered for road users.

Paul Jones, City Operations Section Leader (Electrical) at Cardiff Council, said: "Previously, we'd spoken to a number of cyclists who felt they weren't being detected by the old product as they approached the junction. Since the AGD650 has been in place, this has been greatly reduced.

"It's important for the detector to be able to automatically cancel demands as often cyclists will proceed if the road is clear (sometimes on a red cycle signal), this results in other movements being delayed needlessly because the cyclist has already cleared the junction.

"We have a different detector (the AGD645) in place at a number of sites in the city, so we contacted AGD and that's when they asked us if we'd like to trial the 650 at this junction. We have been really happy with how pro-active they are and the team's communication since sending the initial email, and they even came to install the detector and show the team how it worked."

AGD's Commercial Manager Greg Baker added: "We are pleased to be able to enhance the efficiency and safety of active travel schemes with the new 650 in Cardiff, especially where the cycle ways cross busy vehicle routes across the city.

"Working with forward-thinking local authorities like Cardiff has allowed us to investigate new features. This collaboration has provided an insight of how we can develop new features to support more complex traffic control applications."

The AGD 650 Dual Zone Stop-line Detector - Delivering robust vehicle detection data at the stop-line of multi lane approaches

About the AGD650:

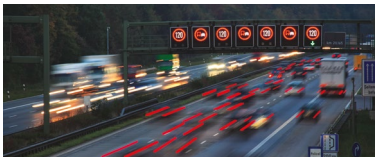
The 650 dual zone stop-line detector improves the efficiency of intersections and junctions, using in-built artificial intelligence to provide ultra-reliable results:

- Robust vehicle detection data (both moving and stationary targets)
- New neural processing AI platform with sophisticated algorithms
- Two independent user-adjustable detection zones
- Deep learning image recognition
- WiFi AGD Touch-setup

Traffic & Pedestrian Control

Highways

Enforcement



Tunnel & Track

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