

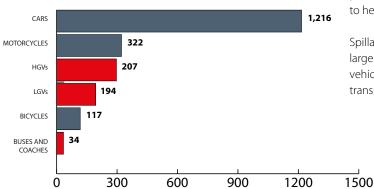


### The issue

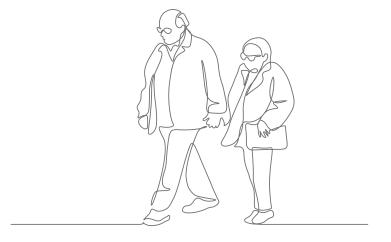
According to a recent Government report, HGVs, LGVs and transport vehicles account for over 26% of all road deaths in GB. Clearly this figure is far too high and systems need to be put in place with the necessary technology able to work towards reducing these figures. Eliminating risk and reducing deaths to vulnerable road users (VRU) who have to co-exist around vehicles as it's part of every day working life is Spillard's objective. Using our 30 years of industry experience and internal R&D department, Spillard has designed the ideal solution to target this issue.

**Pete Spillard, Managing Director:** "The clear risks associated with moving vehicles cannot be understated. With new risks presenting themselves year on year, we see it as Spillard's mission to help reduce the number of accidents, both fatal and non-fatal.

Spillard Safety Systems has evolved into one of the UK's largest vehicle safety equipment suppliers to the commercial vehicle industry, with our customers ranging from HGV, public transport and LGV fleets."



Reported road fatalities in collisions involving different types of vehicles in Great Britain, 2021.



"Preventing deaths and injuries caused by moving vehicles is our top priority."



## The Spillard approach

### Determining the best solution starts by understanding the problem

Spillard's Al Human Detection System has undergone extensive research and development, including from our own in-house R&D department over the last two years, field testing of up to 150,000 miles and 15,000 hours on HGV commercial vehicles and LGV commercial vehicles.

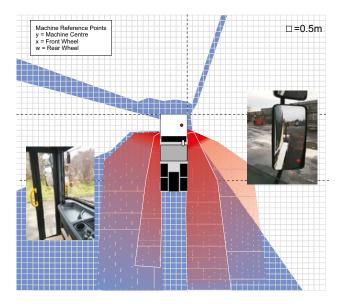
Already known as the industry leader in eliminating risk, we have a simple but effective 3-point process for eliminating your blind spots. Starting with our very own ground-breaking vision studies and over 30 years of commercial vehicle industry experience, we have detected blind spots on a number of different vehicles

#### **Spillard 3-point process**

- Using current reports or by undertaking a bespoke vision survey, we focus on your vehicle's vulnerabilities by identifying potential accident hot spots
- 2. We produce a detailed document that with identified solutions such as 360° cameras, radar, speakers, in-cab screens, human detection devices etc.
- 3. Our mobile team of technicians come to you, fit and test all the required equipment and software, and finish by providing you with a paperless installation report with details and images sent directly to your desk

### **Visibility Study**

Spillard will provide a visibility study to truly understand the issues you are experiencing on-site in your everyday working environment. It's not until we understand these problems that we can fully provide the solutions.



The above image shows a typical CAD drawing of key vehicle reference points. This helps establish the angle of sight and, more importantly, the blind spots whilst you are operating your vehicle.





### The results

Our scan, detect and alert system saves lives The Spillard Al Human Detection System identifies only Vulnerable Road Users (VRU) through deep intelligent mapping. This simple, yet clever system only detects humans, so removes the chance of an annoying driving experience caused by more basic detection models that detect other objects like street furniture, dustbins and road side hedges.

Our system doesn't stop there; by adding a voice alert, the responsibility is shared by drivers and workers alike.

#### **HDS** application is available for commercial vehicles, including:

HGV's and I GV's Articulated Tractor Units Rigid Trucks **Emergency Vehicles** Flatbed Trucks Tipper Trucks

Cement Mixers

Snow Ploughs

Highway Maintenance Vehicles

Tow Trucks

Car Transporters

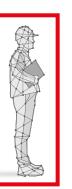
Tankers

Coaches & Buses

Skip Wagons

Bin/Recycling Trucks









Spillard LIVE Connected to video telematics platform



Always on System cannot be



Multi-detect Multiple detection

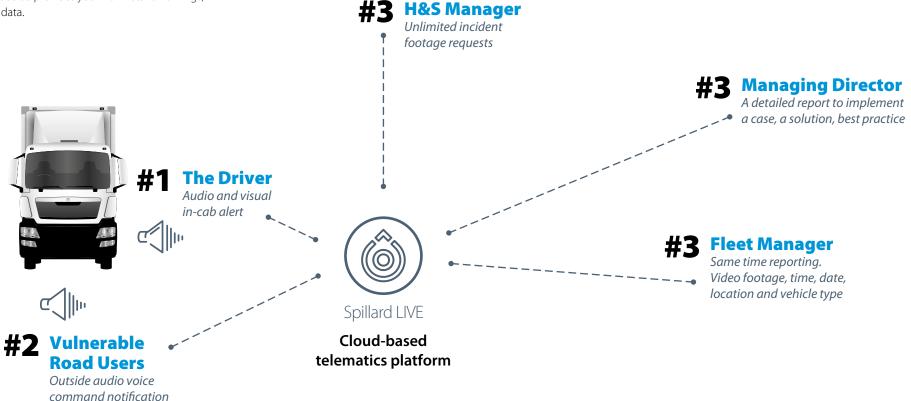


All weather Robust design, effective in



## The integration

From years of working with all levels of vehicle safety, we understand the importance of data in tackling vulnerable road users safety. Our Al Human Detection System, coupled with our Spillard Live fleet management platform, not only deals with the immediate issue, but also provides you with instant warnings, reports, video, and data.





## The in-cab solution

### Al Human Detection System

### **Operator display**

User friendly systems within the cab provide both visual and audible alerts, collaborating with what the devices pick up and instantly alerting the driver with illuminated coloured sections, depending on the direction of the alert. The driver can then react quickly and accordingly.







#### **Features**

- Red/amber/green detection zones to support near miss reporting and critical encroachments
- Active alerts when machine is in a working state
- Speech technology
- Error sensing and reporting
- Designed in accordance with GB38893 and ISO16001
- Spillard Live platform integration will enable full live and historical video analysis, near miss and encroachment reporting, and tracking capabilities

#### **Options**

- External 'person detected' speaker
- Directional in-cab audible system
- 360° surround view display with highlighted zone detection
- Additional sensors for larger or complex vehicles (nine max)



### The detect and alert solution

Al camera technology



#### **Camera detection**

A HD intelligent human detection camera adopts deep learning technology to detect the human form in front of, on the side of and behind the vehicle in real time, warning drivers instantly of risks of collision with nearby humans. The intelligent camera can be installed on the side, front and back of the vehicle, to detect the human form in real time.

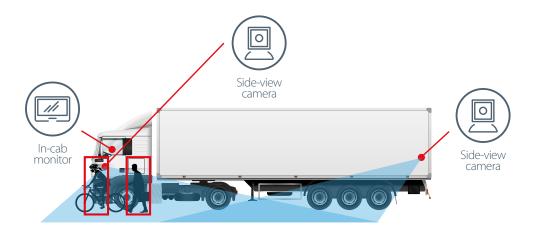
This technology can be applied to both HGV and LGV vehicles and with the flexibility of single or multiple cameras.

#### **Features**

- Waterproof/dustproof rating: IP69K, with shock resistance of 5.9G
- Connects to Spillard Live, our UK based GDPR compliant platform

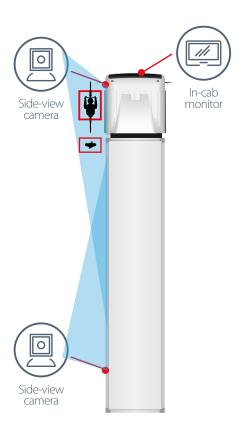


## The complete system



### Simple, yet clever

The idea of an Al Human Detection System is a straightforward one, yet it still requires advanced technology and Spillard's knowledge base to ensure that cameras only detects vulnerable road users. High definition 1080P images and high levels of accuracy give operators the best possible vision, and allows for more reaction time.





## **Spillard Live**

### Designed for the future of connected vehicle technology

### **Cloud platform technology**

Spillard Live cloud platform captures, processes and learns from an equally innovative video telematics system that displays real-time video and analytics from multiple cameras over a fleet of vehicles simultaneously.

All of this live data is safely stored on a UK secured system with full GDPR compliance, providing invaluable trend analysis to support higher safety standards and aiding in better driving habits and accident reduction.

- UK based platform, GDPR compliant
- Unlimited data access, and unlimited users
- User and fleet hierarchy controls, giving you customised access and security levels to meet the needs of your organisation
- Smart maintenance, camera and vehicle status alerts, determining preventative maintenance programmes
- Intelligent reporting, with information provided when needed, plus customised reports from critical alerts and bespoke notifications emailed to your inbox
- Live, historical and requested video replay historical incidents to improve the speed and efficiency of internal investigations for damage claims or accidents



© SPILL∧RD LIV≡

This system is rich with data and live analytics, giving you control of your fleet's hehaviour



compliant



UK servers

24/7 alerts





Video telematics





Trend analysis



What happened

management



# The right partner for you

### Determining the best solution starts by understanding the problem

"The clear risks associated with moving vehicles cannot be understated. With new risks presenting themselves year on year, it is up to us to help reduce the number of accidents, both fatal and non-fatal. Our priority is keeping people safe and making sure these numbers fall.

"Our commitment and attention to detail, along with our continuous improvement policy, has earned our products and solutions acknowledgement by the HSE, as well as numerous awards and commendations from industry professionals. It is clear and reassuring to know that working with Spillard, you're in safe hands."



**Pete Spillard** *Managing Director* 

### **Services & products**



Fleet management



Tailored solutions



National coverage



Commercial vehicle safety



Safe vehicle compliance



24 hour support



# **Working in partnership**





















