

## **Mobile Vision Solutions**

Connected Vehicle Technology









Live

Vision

Detect

Control

## Nearly 30 years of Spillard Safety Systems

"Spillard Safety Systems has always been passionate about the wellbeing and safety of not only people around vehicles, but also the drivers themselves. We have spent years developing technology both in hardware and software to advance mobile safety solutions that increase awareness and reduce incidents."

**Pete Spillard** Managing Director, Spillard

## **Spillard Safety Systems**

Founded in 1992 with a proactive approach to vehicle safety, our aim was to promote the awareness of, and improve the safety of mobile plant through independent machine and site assessments, as well as the supply and installation of mobile safety products.

Spillard Safety Systems has evolved into one of the UK's largest vehicle safety equipment suppliers to the construction, extraction, aggregate and transportation industries, with our customers ranging from quarrying and logistic conglomerates, to original equipment manufacturers.

As well as being one of the UK's leading suppliers of specialised safety equipment to the quarrying and mining industries, our wide customer base also includes many household names in construction, vehicle manufacturing and defence.

An industry leader in innovative design and manufacture of vehicle safety solutions, we pride ourselves in customer service, employing a dedicated in-house support desk and a strong, experienced team of engineers to both carry out UK-wide, quality assured installations and provide first-time fix solutions after service with the support and assurance of our training and quality manager.

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"Spillard Safety Systems has evolved into one of the UK's largest mobile safety equipment suppliers to the quarrying and mining industry"

We are committed to providing our customers with the highest levels of service. This commitment and attention to detail, along with our continuous improvement policy, has earned our products acknowledgement by the HSE, as well as numerous awards and commendations from industry professionals.

operators, but also site operatives.

Every item supplied is carefully developed using the best available technologies. It is then stringently tested and fully customised to the specific needs of the application.

backed by the expertise of people who know the industry inside out – from specification and installation, right through to aftercare

The clear risks associated with moving vehicles cannot be under-



of construction industry accidents are linked to vehicles!

(European Union Occupational Health Agency survey 2014)

Providing the complete vehicle safety solution with service, support and experience since 1992.



Video telematics platform with live monitoring, reporting, safety management



providing more information about

their surroundinas

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

By specialising in one very important area, visibility, or rather the blind spots created by inadequate visibility, we have been able to provide a range of solutions to assist our customers in making work equipment and site vehicles as safe as possible for not only operators, but also site operatives.

Many people still presume that they can be seen by an operator sitting up high on a machine. In many cases that simply isn't true.

Spillard Safety Systems has been providing industries with the answer since 1998 through machine visibility studies. These free studies are an important part of increasing awareness by providing the correct information to be able to manage the risk, and by doing so, making our sites much safer.

## Our systems are available for both commercial and construction vehicles

Our safety equipment is completely hardware-agnostic, allowing retro-fitting, supported by a secure platform that is compatible with any device; desktop or mobile.









**Public Transport** 

Refuse



## Safeguarding technology for the commercial market

Since being established nearly 30 years ago, Spillard Safety Systems has always maintained its focus and passion about the wellbeing and safety of not only people around vehicles, but also the drivers themselves. Originally focussed on the construction and quarry industry, Spillard spent years developing technology both in hardware and software to advance mobile safety solutions that increased awareness and reduced incidents in these highly busy, dynamic and dangerous industries.

However, as the years have passed by, a lot has changed in the world. We operate in a much more sophisticated 24 hours per day, 7 days per week mindset. Nowadays, we are manufacturing more than ever, and this 24/7 operating trend works its way down to the supply chain, meaning we make more, deliver more and sell more.

Now more than ever, fleet managers are responsible for the care and wellbeing of huge fleets operating around the clock, from heavy goods to light goods vehicles, while not forgetting our fleet of buses in and around our cities and towns. Spillard understands that today's working environments have moved on considerably, and have become somewhat busier, faster and, at times, more dangerous. With the aid of the internet, both commercial and private sectors are now ordering online with ease, so much in fact that the increase in everyday deliveries has skyrocketed. This means more HGV and LGV units on the roads, moving in and out of depots and onto busy high streets.

#### The commercial environment

Spillard has naturally evolved from developing technology fit for the mining and construction industries, creating products fit for the commercial environment: those busy depots, loading bays, and the high street. Fleet managers need to have their finger on the pulse and be able to manage what they can see, but also what they cannot see.

Spillard's sophisticated technology has been developed with the fleet manager and driver in mind. Being able to know the whereabouts of multiple vehicles undertaking several drops in this 24/7 environment is priceless. Not only will the driver and fleet manager know the exact location of the vehicle, but they will also know the speed they are doing, the hazards around them and if the vehicle is fit for use e.g. something as straightforward as a door not being shut properly.

#### Technology that's making a difference

With this technology, Spillard can reduce the number of incidents, but also reduce the number of claims made against drivers when they are being blamed for accidents. The recorded and captured footage is extremely important in this culture of the 'blame game', where fleet managers are accountable for so many vehicles and drivers. The multiple cameras, devices, sensors and recording systems Spillard now has in place put both drivers and fleet managers in a very strong, safe and reassuring position.

With people and vehicles being in such close contact all the time, this technology is needed now more than ever. The commercial vehicle industry has progressed and so has Spillard, from the dirt of the quarry to the delivery on the high street.





## **Technology at your fingertips**

With Spillard Live, fleet managers and operators are presented with an incredible amount of technology at their fingertips with such features as:

## Safer driving

Accurate G-shock sensors measure impact force and driving style.

#### **Route history**

You can observe the routes that each of your vehicles have taken at specific times and follow the routes taken by the driver. With live video data, you can watch specific events such as speeding or near misses.

#### **Prompt alerts**

Set custom alerts for your drivers based on how they drive e.g. speeding, harsh braking and more.

#### **Radar alert**

The radar system detects all moving and static hazards within a 10 metre range, preventing collision damage and potential injuries.

#### What happened here?

Replay historical incidents to improve the speed and efficiency of internal investigations for damage claims or accidents.



## $\bigcirc$ SPILLARD LIVE

## Safe and secure data handling, video telematics, live monitoring, reporting and safety management

#### Designed for the future of connected vehicle technology

The award-winning 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.

#### **Technology that is compliant**

Images recorded by surveillance systems are personal data which must be processed in accordance with data protection laws. We are committed to complying with our legal obligations and ensuring that the legal rights of staff and members of the public, relating to personal data, are recognised and respected. Protecting the confidentiality and integrity of personal data is a critical responsibility that we take seriously and robust data protection policies are followed at all times.

Spillard Live records information such as vehicle location, speed, impact force and driving style, allowing you to monitor your fleet and driver behaviour. This driver data and vehicle event footage is tracked in real-time, so you never miss a thing, ever.

Reduce risks and improve vehicle and personnel interaction with Spillard live video telematics.

video footage of any incident.



SPILLARD LIVE CLOUD PLATFORM Award-winning innovative Internet of Things (IoT) platform, advanced visibility and control.





## 

With multiple cameras installed in various configurations, the driver is provided with different views from multiple areas of the vehicle to increase their visual awareness.



The radar system detects all moving and static hazards within a 10 metre range, preventing collision damage and potential injuries.

Warnings and alerts are provided through speech alert technology, audibly making the driver aware of any dangers that may surround the vehicle.



Replay historical incidents to improve the speed and efficiency of internal investigations for damage claims or accidents.

## **Smart live reporting**

Increased fleet visibility helps you to identify what you have and how it's being used. Our GPS tracking solution can help uncover hidden costs, while revealing potential for greater productivity and efficiency.





## Free software\*, free alerts\*

As a UK business, Spillard wants to be the first port of call to help you with your vehicle safety needs. Our software is fully hosted in the UK and records up to 7 million miles in a week, with 135GB of data downloads and over 14,300 video requests in the same period.

\*Free for the first 12 months

## A video telematics platform designed for **the future of connected vehicle technology**

LIV≡ IN NUMBERS



## Award-winning innovation

Our award-winning innovative Internet of Things (IoT) platform was built using the latest cutting-edge technologies that can track a vehicle in real-time with live video and analytics.

The Spillard Live cloud platform captures, processes and learns from multiple sources of information. It is completely hardware-agnostic and is compatible with any device capable of transmitting datasets.

- Latest high-definition telematics camera (IoT, available up to 24 cameras)
- Scalable cloud infrastructure Platform as a Service (PaaS)
- Dynamic NoSQL design can be used with any camera or device
- Advanced data compression
- Big data with video analytics
- Intelligent reporting







## $\bigcirc$ SPILLARD LIVE

A platform – designed for the future of connected vehicle technology.

#### Immediate access

#### 4G access to data when an incident occurs

The ability to bring any number of connected data sources into a single platform means a greater understanding of performance and risk. Immediate access to video content and a wide range of vehicle and driver data provides added context and insight.

#### **Real-time analytics**

#### Driving innovation and understanding

The data received is analysed using complex algorithms to improve driver behaviour in real-time. Audible alerts can be sent to the devices notifying drivers that their actions are being recorded, which can have a positive effect on their behaviour.

#### **Customised reporting**

#### Displaying the most relevant info to you

Critical management data can be displayed in a series of userfriendly dashboards, alerts and reports. The dashboard provides a convenient and useful overview, as well as bespoke notifications, alarms and email alerts.

#### Safe and secure

#### GDPR compliant, secure UK platform

Protecting the confidentiality and integrity of personal data is a critical responsibility that we take seriously and robust data protection policies are followed at all times.

## Connected technologies

## **Technology that improves driver** all-round awareness

Our connected advanced vehicle system provides reassurance to operators, plant and fleet managers with regards to operational safety when driving on today's busy roads and manoeuvring in congested depots.

Improve driver all-round awareness with speech alert technology provided by integrating safety components, including multiple camera devices, rear/nearside object detection and OE vehicle sensors, reducing incidents and vehicle maintenance.

## The future of site safety.

Connecting safety technology while providing one single output on one single platform.

## One single output on one single platform

Temperature warning Overload warning

Fire detection

Object detection

Seat belt warning Park brake warning

- Trailer/rear door warning

- Driver fatigue
- Mobile phone use

1110







Reverse/turning warning

- Driver sign in
- 360° Surround view
- 4/5 Camera system

- Handbrake on
- Seat belt on

- Breathalyser analysis

## **Vehicle Camera Systems** and Mobile CCTV

Specifically developed for extreme environments, Spillard camera systems are designed to cope with the wet, the dirty and the gruelling daily conditions encountered in on- and off-highway use.

## A new generation of technology

Optronics systems were originally designed for use within the quarrying, construction and demolition industries, making them ideally suited to cope with the wet, the dirty and the gruelling daily conditions encountered in off-highway use. Available in a range of options to meet your varied requirements, they have been supplied as part of our All Round Vision range since 1994.

### Safer manoeuvring

The improved field of vision to the operator and the high definition images makes reversing and manoeuvring far safer and dramatically reduces workplace accidents and vehicle damage.

Spillard designs and manufactures reversing camera systems and mobile CCTV solutions for all types of industrial vehicles. Due to its bespoke design, anything is possible

## Unique Spillard features

The unique features, specifically designed into the Spillard system, include: auto ignition power-up – therefore there are no delays in waiting for a reverse signal, permanently reversed image the monitor cannot be accidentally corrected, also rendering it worthless if stolen and hopefully stops repeat late night visits, and tamperproof keypad cover or buttonless monitors to stop the temptation of idle fingers.





Optronics systems (a Spillard product) are legacy proof and modular. Existing monitors, control boxes, cameras and cabling are all fully interchangeable with new units being manufactured today - making upgrading easy and cost-effective.





## Spillard mobile CCTV systems are designed, manufactured and installed exclusively by Spillard Safety Systems.





- Clear high definition capability
- Modular design for tailored solutions
- Legacy proof for easy upgrading
- Optional security and safety features
- Multiple camera and monitor options
- Day/night digital cameras working in zero light conditions
- Virtually maintenance free
- Effective even in poor weather conditions and in both high and low light environments

## MONITORS

## 5.6" colour TFT LCD rear-view monitor

| PRODUCT CODE | DESCRIPTION                                  |
|--------------|--|
| Mm652        | 5.6" High definition TFT monitor (Rear-View) |
| Mm652.001    | 5.6" High definition TFT monitor (Standard)  |

The Optronics M-Series Mm562 is a flat screen LCD video monitor for use in vehicle rear-view applications. The monitor delivers crisp, detailed images for driving and backup safety.



- 800 x 600 resolution
- 4:3 Aspect ratio
- Anti-Glare screen
- DC12/24v 5w
- 145(L) x 120(W) x 25(D)mm

## 7" Colour waterproof 2-CHL monitor – IP67

| PRODUCT CODE | DESCRIPTION                     |
|--------------|---------------------------------|
| Mm701        | 7" 2-Channel Waterproof Monitor |

7" Waterproof video monitor, 2-channel camera inputs with triggers for all outside on-vehicle applications.

- 7" TFT Display
- 1024 x 600 resolution
- 16:9 Aspect ratio
- Anti-Glare screen
- DC12/24v 5w
- 261(L) x 177(W) x 30(D)mm

## **GPS navigation monitor**

| PRODUCT CODE | DESCRIPTION                  |
|--------------|------------------------------|
| Mg652        | 7" HD GPS Navigation Monitor |
| Om401        | 7" HD SD Recording Monitor   |

7-inch colour heavy duty LCD reversing monitor with in-built satellite navigation system.

- 7" TFT Display
- 1024 x 600 resolution
- 16:9 Aspect ratio
- Anti-Glare screen
- DC12/24v 5w
- 261(L) x 177(W) x 30(D)mm



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## 7" TFT quad monitor

| PRODUCT CODE | DESCRIPTION                |
|--------------|----------------------------|
| Mm700        | 7" TFT Quad Monitor        |
| CM704        | 7" TFT Quad Camera Monitor |

7" Optonics M-Series TFT Monitor, available with single camera, double or quad camera inputs.



- DC12/24v 5w
- 261(L) x 177(W) x 30(D)mm

## 8 or 10" TFT LCD heavy duty panel

| PRODUCT CODE | DESCRIPTION          |
|--------------|----------------------|
| Om100        | 10" Heavy Duty Panel |
| Om800        | 8" Heavy Duty Panel  |

Metal housed 8 or 10 inch monitor suitable for dash or panel mounting. Equipped with an IPS panel with a 4:3 aspect ratio which provides crystal-clear image quality with excellent 178° viewing angles.



1024(H)x768(V) native 1920x1200 max

- 4:3 Aspect ratio
- 800:1 Contrast
- HDMI, VGA, BNC and RCA Connectivity
- DC12V 12w

## **C-Series reversing camera system**

| PRODUCT CODE | DESCRIPTION                      |
|--------------|----------------------------------|
| OPT700       | C-Series Reversing Camera System |









## **INCIDENT RECORDERS** – 4G & Hard drive mobile DVRs

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LIVE

(0)

LIVE

## **4-CHL Mobile DVR**

#### PRODUCT CODE DESCRIPTION Or404 4-Channel Mobile DVR LIVE

The Or404 is a 4-channel digital video recorder, providing 1080p full HD video for excellent picture detail and clarity.

- AHD camera (720p, 1080p)
- Integrated 3G modem
- Cloud-platform for live streaming of images
- API available for direct integration with telematics software
- GPS/GLONASS
- Highly sensitive positioning solution for live vehicle tracking and reporting
- 90(L) x 120(W) x 28(H)mm (Metal cover size: 125 x 147.5 x 36mm)

## **5-CHL Mobile DVR**

| PRODUCT CODE | DESCRIPTION      |
|--------------|------------------|
| Or401        | 4G 5-Channel DVR |

The Or401 is a full HD 1080/720p ruggedised, 5-channel mobile digital video recorder designed for vehicle surveillance and monitoring, with built-in connectivity, advanced video compression and GPS positioning technology for location tracking.

- 4 channels AHD + 1 channel 720p/1080p
- Hard disk for main recording
- GPS for location tracking
- WiFi for video files download (optional)
- Built-in 4G for live view and remote management
- Vibration-resistant design
- USB2.0 high-speed backup
- 190(L) x 180(W) x 60(H)mm

## 8-CHL Mobile DVR



An 8 channel mobile digital video recorder ideal for video surveillance and remote monitoring applications, featuring the latest in GPS positioning technology along with speed and G-shock sensor data built-in. This 8-channel MDVR features a high-speed processor and embedded operating system, advanced video compression technology, as well as Wi-Fi for wireless data upload.

- Modular design enables easy maintenance
- Revolutionary anti-vibration technology
- Supports 6-channels AHD (1080p) + 2 channels IPC (1080p)
- Up to 2TB (max) hard disk storage
- Dual streams for local recording and wireless transmission
- GPS for location tracking
- Built-in 4G for live view and remote monitoring Internal WiFi 802.11N supported
- Supports 24-hour single-file recording mode
- 255.3(L) x 150(W) x 89.1(H)mm



| 12-CH | L Mobile | e DVR |
|-------|----------|-------|
|       |          |       |

| PRODUCT CODE | DESCRIPTION           |
|--------------|-----------------------|
| Or1200       | 4G 12-Channel AHD DVR |

The Or1200 is a high performance, ruggedised, 12-channel mobile digital video recorder specifically designed for in-vehicle recording, allowing fleet managers to record and stream live footage from a vehicle. It lies at the heart of a system which captures, records and manages high definition video combined with GPS locating technology, 4G network and wireless upload.

#### ■ Supports 8-channel AHD (1080p) + 4-channel IPC (1080p)

- Modular design for easy maintenance
- Revolutionary anti-vibration technology
- Supports 2.5" 2TB hard disk storage and SD card for mirror recording
- Dual streams for local recording and wireless transmission
- Internal GPS for location tracking
- Built-in 4G for live view and remote management
- 295(L) x 222(W) x 89(H)mm

## 24-CHL Mobile DVR

| PRODUCT CODE | DESCRIPTION       |
|--------------|-------------------|
| Or2400       | 4G 24-Channel DVR |

The Or2400 is a 24-channel mobile digital video recorder allowing commercial fleet owners to record and stream live footage from a vehicle. It is our largest MDVR, supporting up to 24 cameras (16 x WD1 channels + 8 x 720p HD IP channels), GPS tracking, anti-vibration technology, complete data recovery and two hard-disk storage units (up to 2TB each).

- Modular design enables easy maintenance
- Revolutionary anti-vibration technology
- 16 WD1 channels + 8 IP channels in 720p
- Two hard disk storage units (2TB max each)
- Dual streams for local recording and wireless transmission
- GPS for location tracking
- Built-in 4G for live view and remote monitoring
- Internal WiFi 802.11N supported
- Supports 24-hour single-file recording mode
- 324.6(L) x 238(W) x 116(H)mm
- $(\mathbf{0})$ LIVE SPILLAT SPILLARD LIVE CLOUD PLATFORM g innovative Internet of Things (IoT) platform advanced visibility and control





**2TB** 

H.264

📩 õ 着

3/4G)

**4G** 

























Reduce risks and improve vehicle and personnel interaction with Spillard live.

This mobile platform provides a sistent user experience wl ou are. Efficiently mo nitor vou operations from your smarth espond instantly by access footage of any inciden

Ô SPILLARD LIVE

## Heavy duty reversing camera

| PRODUCT CODE | DESCRIPTION              |
|--------------|--------------------------|
| Mc353        | Rear-view Camera         |
| Mc353.001    | Rear-view Camera - White |

#### **IP68**

The reversing camera is completely weatherproof with an IP68 rating. Strong and reliable, it is shock resistant with a 10G vibration and 100G shock rating.

- 1/3" colour CCD
- 120° wide-viewing angle
- OLux (LED on)
- IR distance of 10 metres
- IP68 rating

## **Dual lens reversing camera**

| PRODUCT CODE | DESCRIPTION                          |
|--------------|--------------------------------------|
| Oc200        | Dual Lens Rear-view/Reversing Camera |

### **IP68**

Dual lens rear-view camera, with a 95°/120° view angle to reduce the blind spot.

#### 1/3" colour CCD

- 95° 120° wide-viewing angle
- OLux (LED on)
- IR distance of 10 metres
- IP68 rating

# suitable for both day and night use.



Mc279

**IP68** 

#### 1280(H)x720(V)

120° wide-viewing angle

**Reversing camera** 

DESCRIPTION

Reversing Camera

This HD rear-view camera is suitable for both day and night use with infrared

DESCRIPTION

With infrared LEDs and an adjustable sun visor, the HD rear-view camera is

Rear-view/Reversing Camera

PRODUCT CODE

1/3" colour CCD

IP68 rating

PRODUCT CODE

120° wide-viewing angle

IR distance of 10 metres

Wide adjustable sun visor

**Reversing camera** 

LEDs and an adjustable sun visor.

Mc259

**IP68** 

- IR distance of 10m Wide adjustable sun visor
- IP68 rating



## **Optronics wide eye**

| PRODUCT CODE | DESCRIPTION        |
|--------------|--------------------|
| Mc180        | Optronics Wide Eye |

#### IP67

Dramatically increase the vision of drivers with the New Optronics Wide Eye Camera System, which uses a fish eye camera to produce a 180° view angle, allowing for a dramatic increase in the driver's field of vision.

- 1/3" CCD
- 180° Super Wide Angle
- 1280x720@30fps resolution
- 0.05Lux (Colour Illumination)
- IP67



## **CAMERAS** – Side cameras

## Multi-purpose camera

| PRODUCT CODE | DESCRIPTION      |
|--------------|------------------|
| Cc700        | Side-view Camera |

### **IP68**

Compact wing mirror mounted side camera. Used for wide loads and trailers.

| 1/3" colour CMOS                       |  |
|--|--|
| AHD                                    |  |
| 120° wide-viewing angle                |  |
| DC 12V (+/-10%)                        |  |
| Wing mirror mounting brackets included |  |
| IP68                                   |  |
|  |  |
|  |  |

## Side-view camera

| PRODUCT CODE | DESCRIPTION      |
|--------------|------------------|
| Mc258        | Side-view Camera |

#### **IP68**

Mini side-view camera with flexible mounting and angle adjustment options.

## 1/3" colour CMOS 700 TVL

- 120° wide-viewing angle
- IR distance of 10 metres



## **HD Side-view camera**

| PI | RODUCT CODE | DESCRIPTION         |
|----|-------------|---------------------|
| Μ  | lc445       | HD Side-view Camera |

## IP68

Ruggedised HD side-view camera with infrared night vision.

1/3" colour CMOS 1280x720 resolution 120° wide-viewing angle IR distance of 5 metres IP68





## Side-view camera

| PRODUCT CODE | DESCRIPTION               |
|--------------|---------------------------|
| Mc998        | Side-view Camera (Non-HD) |
| Mc999        | HD Side-view Camera       |

#### **IP68**

A rugged, wide-view camera with flexible mounting and angle adjustment options, and infrared night vision.

- 1/3"colour CMOS
- 150° wide-viewing angle
- IR distance of 5 metres
- For front/rear/side of vehicle
- IP68 shatterproof
- Water-resistant



## Side-view camera

| PRODUCT CODE | DESCRIPTION                                |  |
|--------------|--|--|
| Mc250        | HD Infrared Waterproof Side Camera (Black) |  |
| Mc251        | HD Infrared Waterproof Side Camera (White) |  |

#### **IP68**

Side-view camera with flexible mounting and angle adjustment options, and infrared night vision.

- 1/3" colour CCD
- 2.8mm lens
- 120° wide-viewing angle
- IR distance of 10 metres
- For rear or side of vehicle
- IP68 rating



## Side-view camera

| PRODUCT CODE | DESCRIPTION      |
|--------------|------------------|
| Mc325        | Side-view Camera |

#### **IP68**

A rugged, wide-view camera with flexible mounting, angle adjustment options and infrared night vision.

- 1/3" SHARP CCD
- 600 TVL (976x582)
- 120° wide-viewing angle
- IR distance of 5 metres
- IP68



## **Driver Status Monitor (DSM) – CAV ADAS**

| PRODUCT CODE | DESCRIPTION                          |
|--------------|--------------------------------------|
| CAI1002      | 720P AHD Driver Active Interface Kit |

The DSM is a driving auxiliary warning system that is based on machine vision technology to detect abnormal driving status. It can help detect and alarm the following conditions, including fatigue, distraction, smoking and making a phone call while driving.

The intelligent algorithm analysis detects when the driver shows signs of fatigue, triggering an alert. If the person continues to drive whilst still showing signs of fatigue, the system will continue to sound an alarm.

| ô    |  |
|------|--|
| -IVE |  |

In addition to detecting driver fatigue, the system also monitors:

- phone use
- smoking in the vehicle
- driver presence, alerting to vehicle runaways

The Artificial Intelligence black box system also features an output used to trigger external warning devices and telematics systems so that alerts can be remotely monitored in real-time.



## Alerts available using the Driver Active Interface Kit

R

**DSM** camera

#### **ADAS** camera

- Lane departure warning
- Forward collision warning
- Redestrian & cyclist detection
- $\mathbf{A}_{\mathbf{z}}^{\mathbf{z}}$  Driver fatigue warning
  - Mobile phone usage warning
- Smoking warning
- Ø Driver distraction warning
- X Seat belt detection
- 👮 No driver present

## Forward-facing connected camera

| PRODUCT CODE | DESCRIPTION                     |
|--------------|---------------------------------|
| OR102        | Forward-Facing Connected camera |

If you want the best performance out of your drivers and vehicles, you need Spillard's OR102. It's a full HD 1080p connected vehicle telematics camera which can help you reduce fleet operating costs, protect your drivers against false driving allegations and increasing insurance premiums, and allows you to monitor your drivers from anywhere.

The OR102 features instant remote cloud upload, built-in GPS and GLONASS receiver, and self-checking notifications, to guickly deliver high quality videos of incidents and driving data to our big data platform.

"...can help you reduce fleet operating costs, protect your drivers against false driving allegations and increasing insurance premiums..."



**4G**》

Industry-leading, connected HD quality vehicle camera and telematics system

Industry-leading, connected HD-quality vehicle camera and telematics system

High-quality super-wide viewing angle 



Provides HD images before, during and after an incident



Monitor driver behaviour from anywhere using the Spillard Live cloud platform





The OR102 reports information such as vehicle location, speed, impact force and driving style, allowing you to monitor your fleet and driver behaviour at all times.





Accurate G-shock sensor measures impact force and driving style



**Provides First Notification** 

of Loss (FNOL) alerts





Accurate G-shock sensor measures impact force and driving style



Built-in GPS and Glonass receiver with self-checking notifications



Full integration with MAPS with accurate speed limit data

## Kill the blind spot with 360° viewing

Spillard technology creates a 360° quadraspheric bird's eye image of your vehicle and it's surroundings on a single display, increasing driver awareness while potentially reducing risk and saving lives.

## 360° Surround view camera system

Optronics 360 is a high performance surround view camera system, creating a 360° quadraspheric bird's eye image of your vehicle and it's surroundings on a single display. Utilising 4 ultra wide digital cameras, Optronics 360 provides operators with the ultimate surround view, increasing their all round awareness while potentially reducing risk and saving lives.

#### Kill the blind spot

When the worst happens – and someone is killed or seriously injured by heavy machinery or a commercial vehicle – it's too late to discover that it was caused by a blind spot. Too late to realise that it could have been easily rectified with the right safety aids, properly installed. Too late to make sure that the driver could see all around the vehicle, and at a distance to be able to stop in time.

Serious accident rates and fatalities in construction, commercial loading bays, mining, quarrying and depots are still too high. Even one is too many. And every one brings in its wake a tragic trail of human loss, compromised duty of care, possible prosecution, compensation claims, and irrecoverable reputational damage.

It simply isn't safe to assume that machines and vehicles have no blind spots. They do. Visibility studies prove it, time and time again, and even the operators may not realise it. Even when mirrors and cameras are fitted, poor installation can still leave blind spots – and blind spots can kill.

#### Taking all round vision to the next level

The 360° surround view camera system utilises multiple ultra-wide cameras mounted in strategic locations around a vehicle. The images are then stitched together to synthesise a top down bird's eye image of the vehicle.

Utilising high powered image processors, the system is capable of producing bespoke image designs to suit the vehicle and it's environment, whether that be a small excavator working on a tight construction site, or a large haul truck working in an open surface mine.

Already proven in the high end passenger car market on the BMW 5 series and the Land Rover/Range Rover models, all the advantages of this highly sophisticated system are now available for use on mining, quarrying and construction machines and also commercial vehicles.

#### **Key benefits**

- Scalable field of view
- Horizon to horizon visibility
- Programmable image regions even, offset front and back or left and right
- Picture in picture image regions can be placed on top of surround view to provide additional image data, for example a rear-view image when reversing
- Helps improve drivers all-round awareness
- Helps to prevent damage to vehicles



No compromise, cutting corners or limitations on all round visibility when people's lives and safety are at stake.



Complete driver/operator control with real-time live viewing showing blind spots, giving instant awareness of any danger and allowing drivers to work efficiently at all times.

### **Horizon to Horizon**

A key advantage of 360° is that it can be programmed from horizon to horizon as well as forward and rear. By covering a much wider area, this makes it the most effective system on the market for reducing blind spots and improving all round visibility.

## Flexible application design for vehicle, site or the environment

The programmability of the Optronics 360 system allows for the image regions to be processed to provide image data specific to your individual requirements, making every installation unique.



A bird's eye view clearly shows the operators blind spot while operating the vehicle. The 360 system eradicates this blind spot issue and allows multiple operators to work with ease at the same time, allowing time on-site to be more productive.

"Spillard Safety Systems and Spillard Live continue to develop technology to advance mobile safety on vehicles, therefore improving the safety of operators, workers and the public in an ever changing busy environment"



#### Last revision December 2020

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## Mobile safety solutions that increase awareness and reduce incidents











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