

ASL Vision – No more blind spots

That bane of safe driving, blind spots, could become a thing of the past thanks to a relatively new product, ASL360 Surround View (SV). This camera system improves visibility by providing a 360 degree view around a vehicle. Its creator, ASL Vision, has also released another device using all round cameras, but for a tour coach application. ASL360 OnTour helps improve touring passengers' experience and can be used to increase revenue.

360 degree vision

Promoted as a world first by its supplier, ASL360 SV provides a view all round the PCV, using separate ultra-wide angle cameras mounted on the front, sides and rear of the vehicle. High tech 'video stitching' techniques enable images caught by the cameras to be merged together into a single, 360 degree picture.

The company claims that on other similar systems, fisheye distortion due to the wide angled cameras can be a problem. However, on ASL's device, heavy duty signal processing eliminates this. A basic version will interface with up to six cameras and there is an enhanced option that can be used with 12 cameras. Custom options are available to link the system up to a vehicle's CAN bus system.

On ASL360 SV, the all round view is displayed in the driver's cab. The system's Electronic Control Unit (ECU) can also be used for other applications, including speed measurement, obstacle detection and establishing virtual safety zones.

The 360 degree image is intended to eliminate blind spots, which the manufacturer claims is a major concern for all vehicle operators. In one guidance document, the DfT estimates the financial cost to society for any road fatality as over £1.6m. Organisations and lobbyists, such as the London Cycling Campaign, have been arguing for some time for authorities to treat the blaming of a blind spot for an accident as an admission of guilt.

ASL360 SV is designed to reduce collisions between a vehicle and pedestrians, cyclists, street furniture and other road users in situations such as: turning left; manoeuvring in tight spaces; in pedestrian precincts; passing parked vehicles; and in any other situation where visibility may be compromised, such as when passengers or objects might become trapped by closing doors.



LtOR Under Secretary for Transport, Norman Baker and MD of ASL Vision, Ian Seward.

On Tour

The ASL360 OnTour uses a series of miniature cameras fixed to the vehicle to capture the best view for passengers. These are connected to a control unit that processes the video and broadcasts it wirelessly to mobile phones or iPods. Customers must download an application (App) to view the

footage. Using this, they can zoom into certain parts of the video and take still snapshots of the 360 view. They cannot actually record the moving footage. Revenue can be gained from individual downloads of the App, which can be modified to feature a logo matching company livery or service branding.

The idea behind the scheme is to offer everyone 'the best seat' on the tour. An optional recording module allows the whole journey footage to be stored onto solid-state flash memory, which can be copied and sold on to passengers by the operator.

Highly educated team

Creating technology to aid companies in their productivity and earning more revenue are some of the main aims of ASL Vision, which is part of the ASL (Application Solutions Ltd) network of companies in Lewes. The company was established in 1989 and now has two sites in the East Sussex town, employing leading scientists, engineers and experts in their fields. Over half of its employees have post graduate qualifications; a third doctorates. The highly educated team is the driving force behind the delivery of what it describes as innovative, refined, state of the art products and applications.

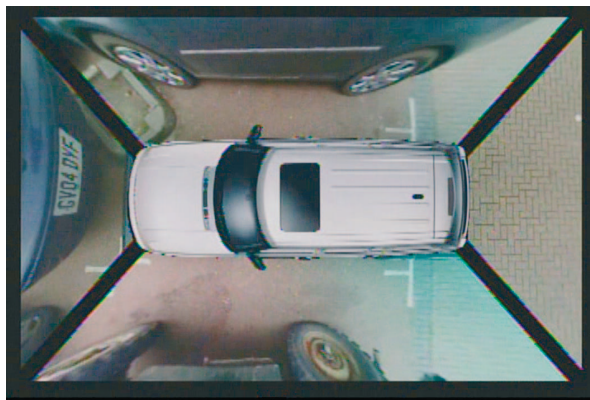
ASL Vision claims it has developed significant intellectual property. One application in particular, video camera signal processing, is deployed by several end customers. It invests in its own programs to develop its technology further and has created several spin-offs in the past.

Not only does ASL design the system, but it can also install the ASL360 products and ensure they work properly. Alternatively, customers may wish to use their own contractors to fit the system, which the company believes will be a popular option. The solution's cost varies greatly, depending on how many are ordered. Although Euro Bus Expo was the first major public outing of the product for our industry, it has been

available to purchase outright for the last 12 months. However, it has been used in vehicles produced by some of the largest automotive companies for around five years. ASL reports that Go-Ahead is trialling the technology at the moment with a view to installing it on its buses.



One of the cameras that are attached to PCVs as part of the ASL360 system.



ASL360 gives a complete view all around the vehicle.

Norman Baker visits

Recently, Under Secretary for Transport, Norman Baker, visited ASL's headquarters to view its products. The Lewes MP was given a tour of the company's site, followed by a demonstration of ASL360 SV.

Norman Baker said, 'Technology can play an important role in transport, whether by improving safety, cutting carbon emissions or increasing the information available for passengers. I was pleased to learn more about the work of ASL Vision in this fascinating field.'

MD of ASL Vision, Ian Seward, said, 'We are delighted to have had Mr. Baker here. It shows an acknowledgement of all our efforts in the field of transport. We feel we have made some significant breakthroughs in this area and it's very encouraging to get some recognition and profile.'

By Chris Peat