



# **TECh Side Detection System**

Reduce the risk of injury or death to pedestrians and cyclists

The AASDS Side Detection System is an ultrasonic sensor system designed to warn and assist drivers of their vehicle's position in relation to cyclists and pedestrians and to warn cyclists and pedestrians of the vehicle's intention to turn left..

## The problem

The increase of operational physical contraints on our road networks in the UK and with more and more cyclists and pedestrians sharing our roads. driver awareness has become a must.

#### Costs

#### · Accident injuries

Costs with staff downtime and medical costs. E.g. Someone who has been hit or even a fatality.•

#### · Damage to vehicles

Damage caused through accidents can range form a few pounds through to thousands.

### · Insurance premiums and payouts

## • 3rd party damage

These are unpredictable costs and range from walls and fences to bollards and vehicles but to name a few. These not only reflect on your running profits, but also on the 3rd party's.

#### · Vehicle downtime

Vehicles that aren't on the road when they should be are costing you money! Drivers that are unable to perform their duties due to no available vehicle can perform other tasks but is primarily non-productive.

## Goals

- Reduce the risk of injury or death to pedestrians and cyclists.
- Driver assistance during low speed restricted manoeuvres.
- Driver awareness when cyclists or pedestrians enter the nearside blind spot.
- · Audible and visual alert to a potentially dangerous situation.
- Designed to prevent driver distration with nuisance operation.
- Programmed turn on/off speed control.
- To offer an external audible warning to pedestrians and cyclists of the vehicles intention to turn left.
- To reduce excess noise pollution by minimising the excess external messages.

## **Benefits**

- Driver awareness is increased through repetition and their ability to judge distances from vehicle to objects is increased.
- Additional focus is placed on this area of the vehicle being a potential hazard.
- · No fatalities! No-one is injured.
- · Reduction in vehicle downtime.
- · Reduction in downtime of operators/employees.
- · Reduced growth in insurance premiums.
- · Increased running profits.

## **How it works**

When the vehicle slows to approximately 10mph and the left indicator is turned on, the system is activated and an optional audible external warning message "Warning, the vehicle is turning left" is announced once, to warn any pedestrian or cyclist of the approaching vehicle and its intention.

As the vehicle approaches between 800-600mm of an obstacle, the display will light the GREEN light on the display but with no audio. No external warning is announced.

If a pedestrian or cyclist approaches between 600–400mm of the vehicle, the display will light the AMBER light on the display but with no audio. The external warning is announced and whilst the detection is continuous, the warning message will be repeated with a 3 second gap between messages.

If a pedestrian or cyclist approaches between 400-0mm of the vehicle, the display will light the RED light on the display and with continuous internal audio. The external warning message continues to be announced whilst detection is present. When the handbrake is applied the system switches to standby mode.

