PRODUCT SOLUTIONS FOR
INTELLIGENT TRAFFIC SYSTEMS

Modern AGD Radar Use and Applications

MOVA, SD, Green Wave, Cyclist & Bus detection

By

Oliver Bain

AGD Product Introduction and Support Team

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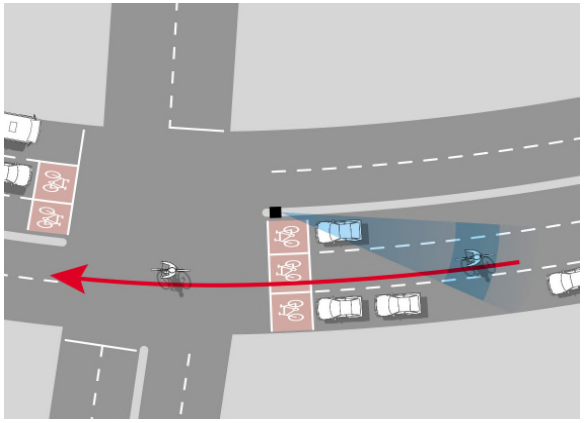

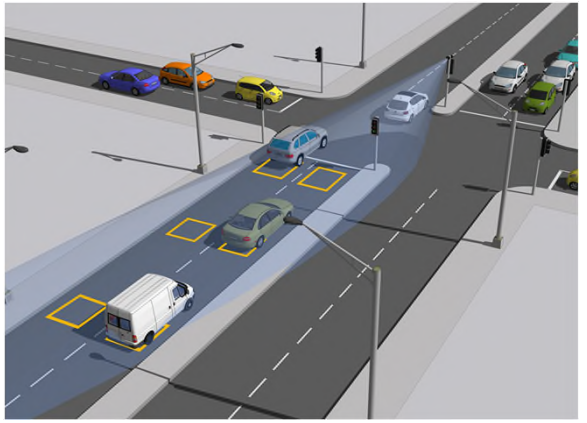

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Traditional Radar

Advantages

Disadvantages

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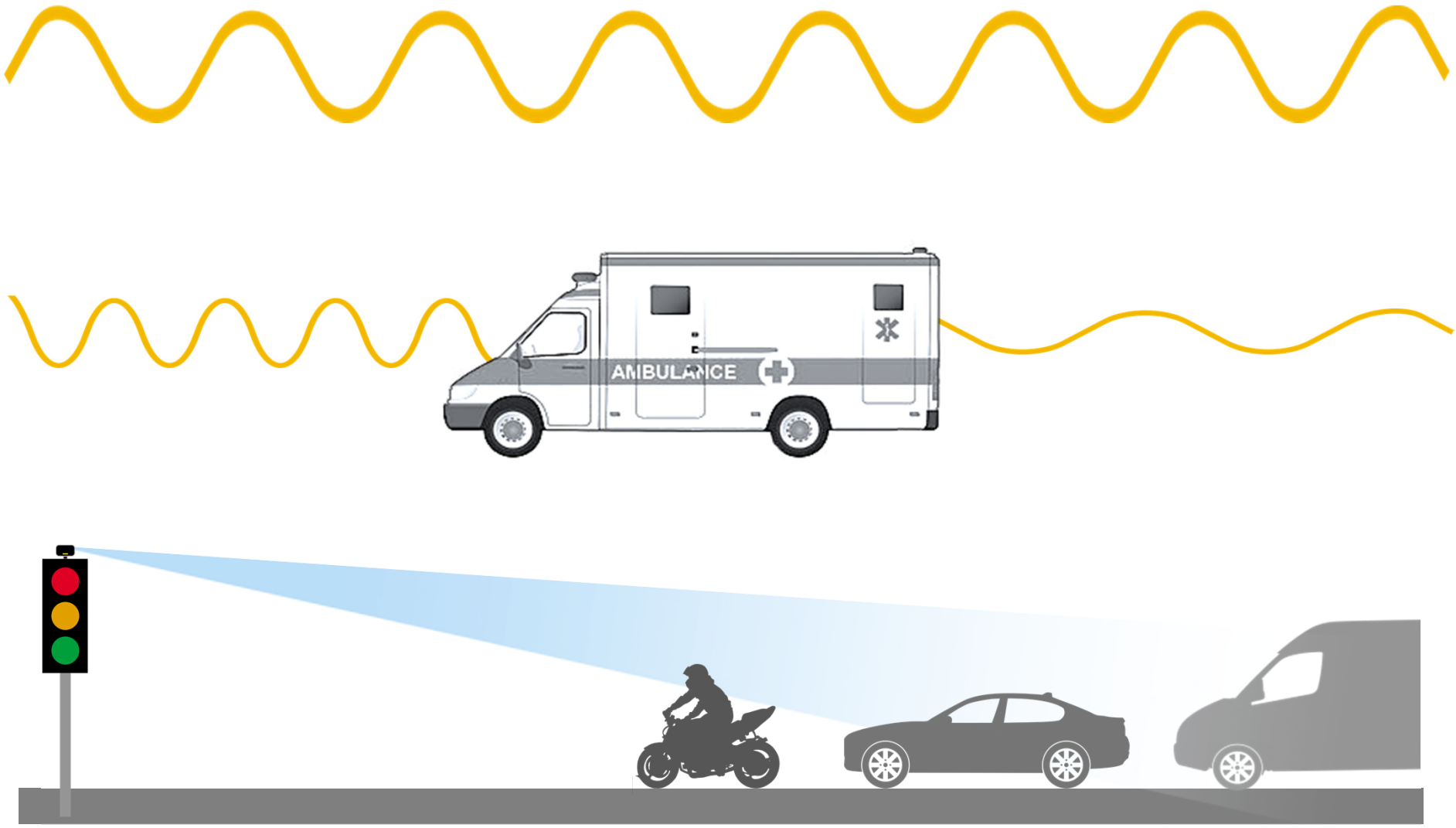
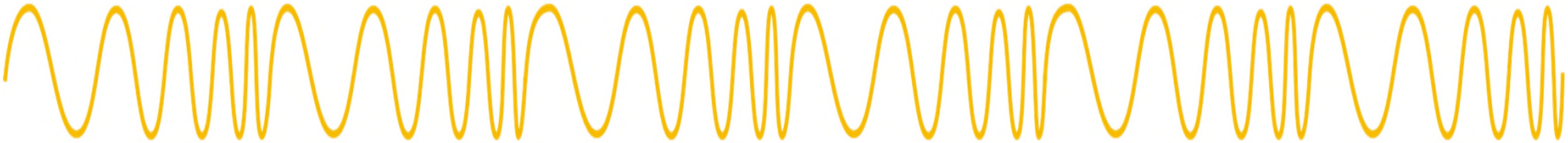
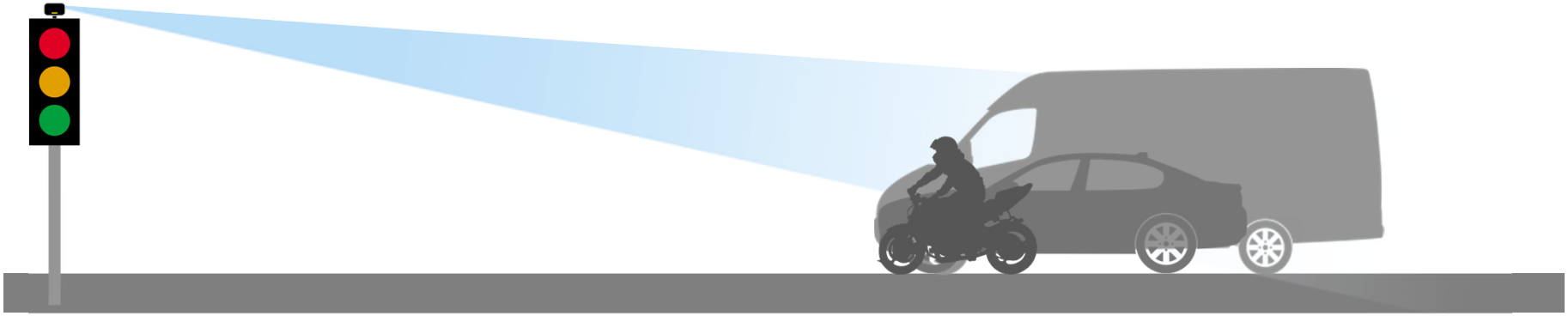
Traditional Radar



Modern AGD Radar





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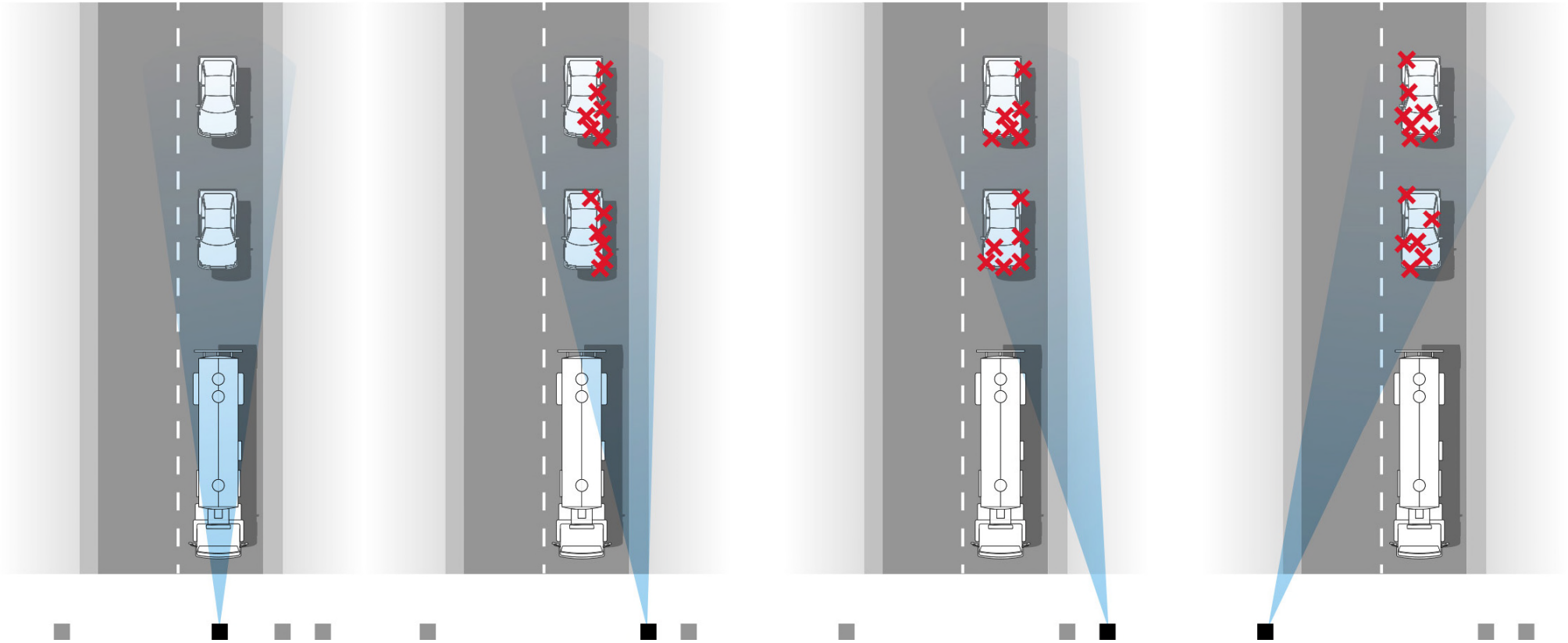
Understanding Masking and Occlusion



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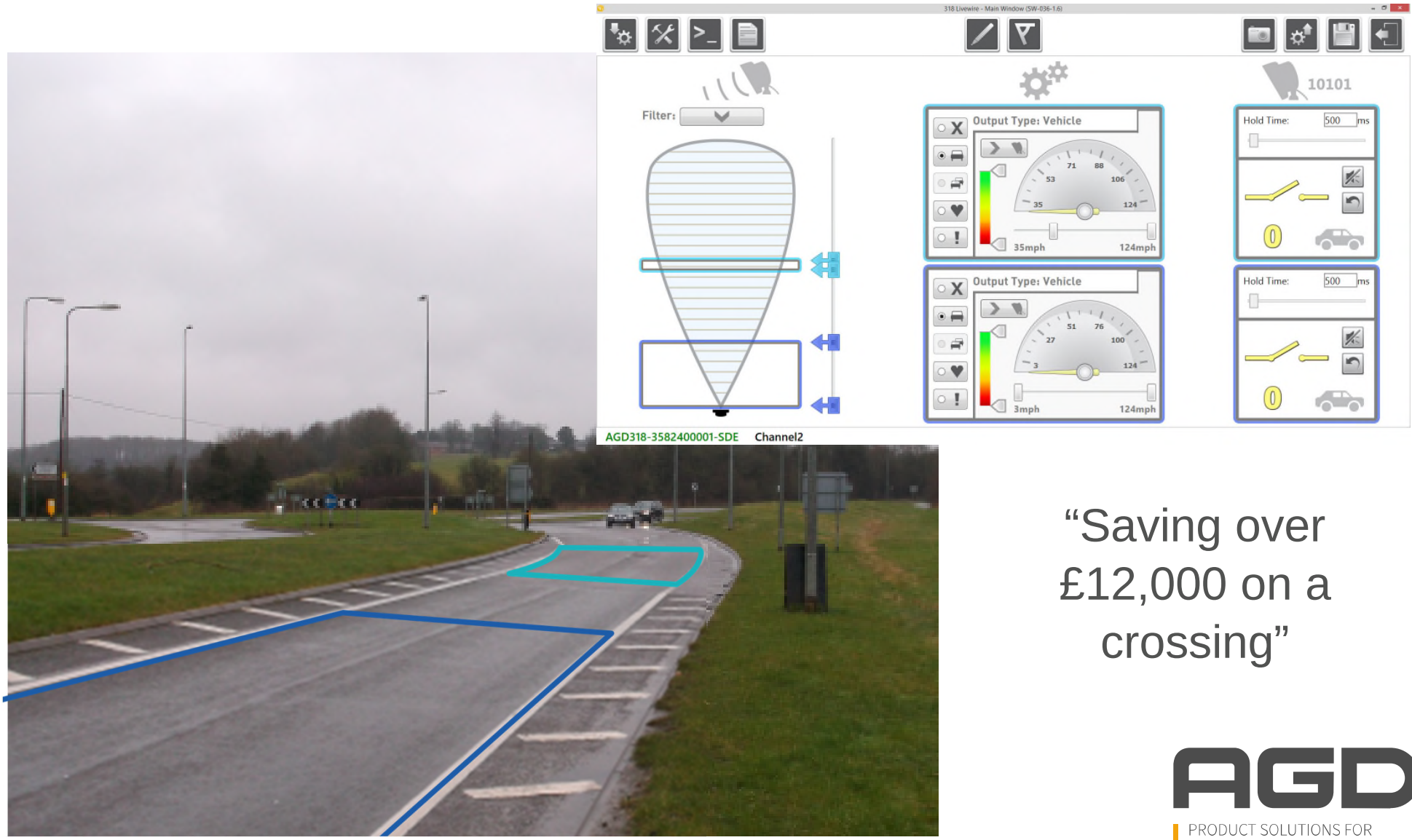
Double Extension (SDE)

AGD 318
TRAFFIC CONTROL RADAR



"Saving over £12,000 on a crossing"

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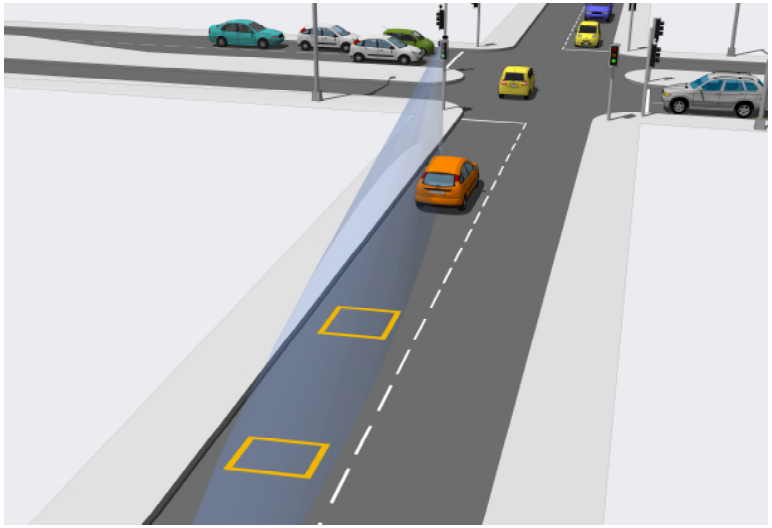
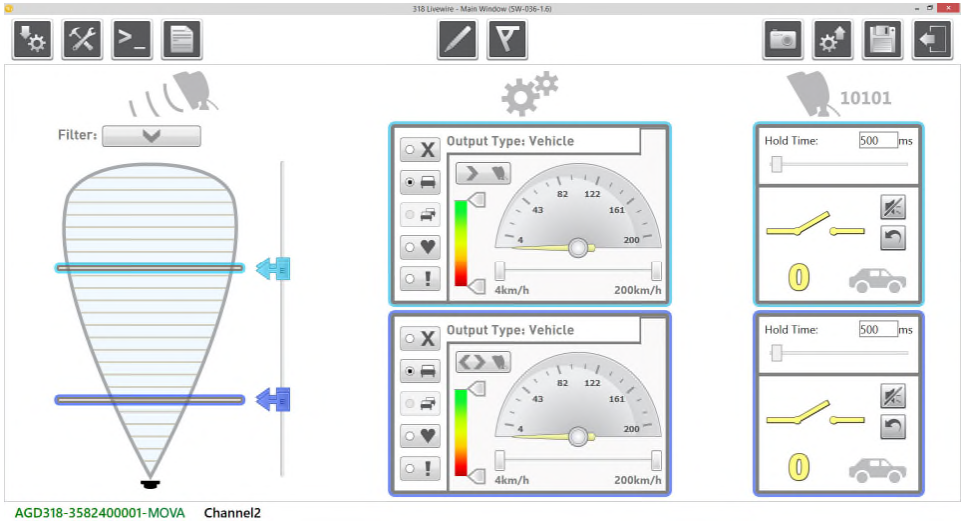
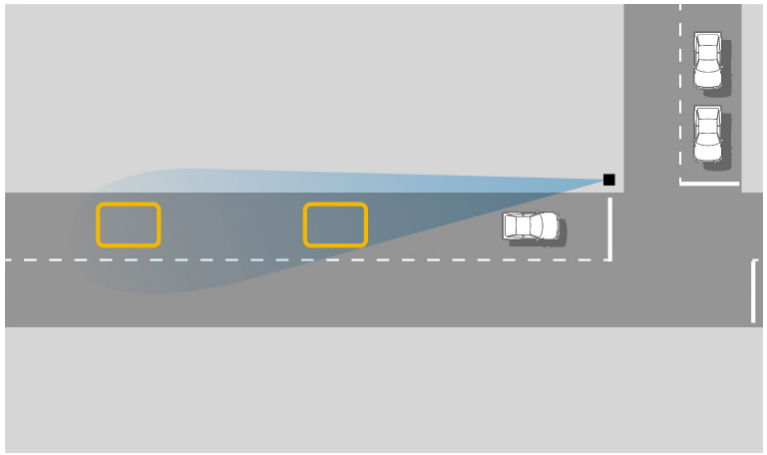
MOVA

AGD **318**
TRAFFIC CONTROL RADAR







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Green Wave & Bus Priority

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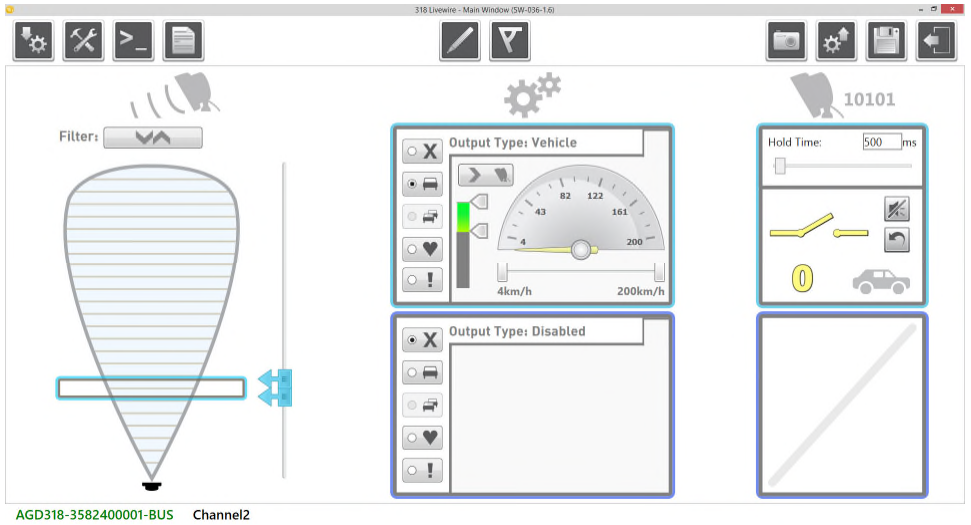
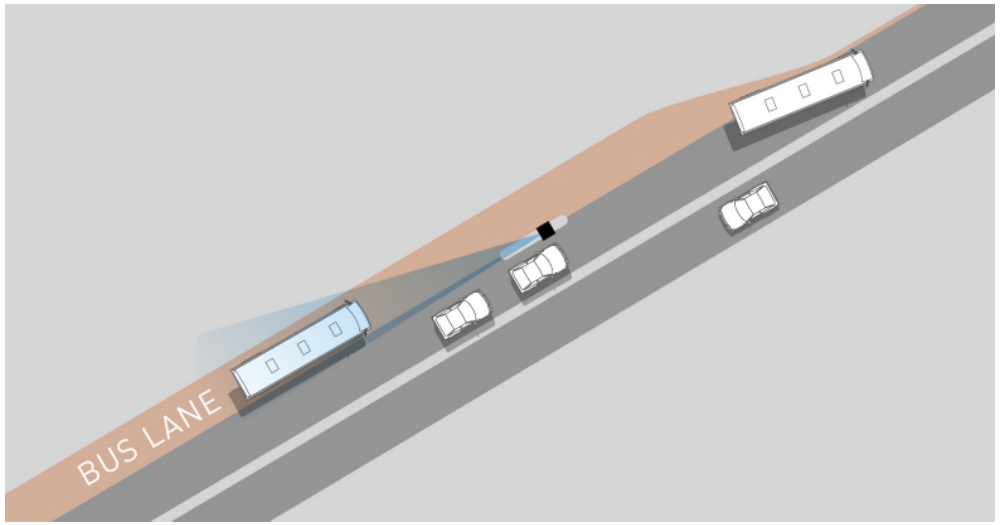
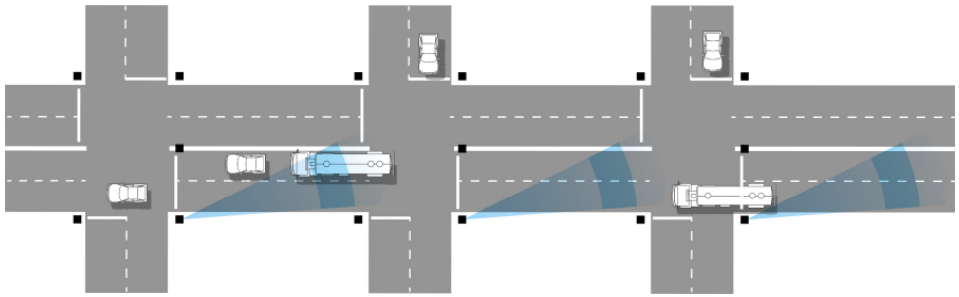
TRAFFIC CONTROL RADAR







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Cycle Differentiation & Detection

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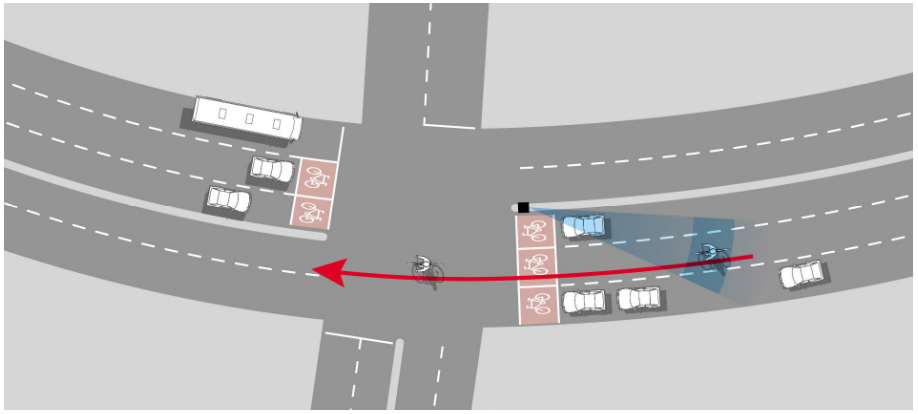
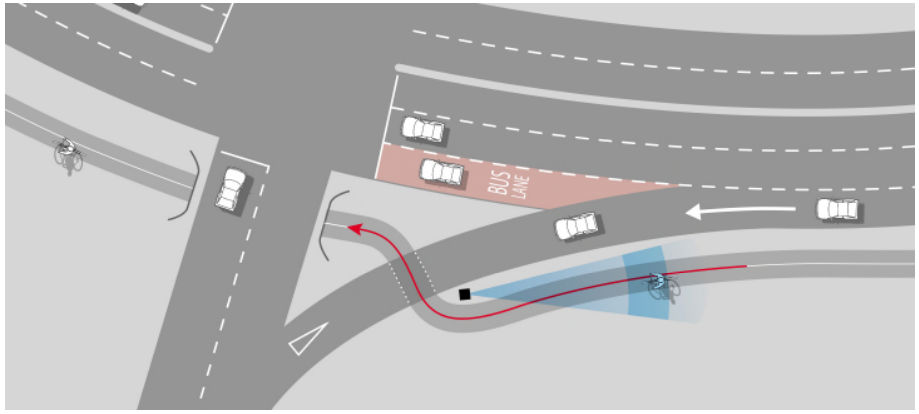
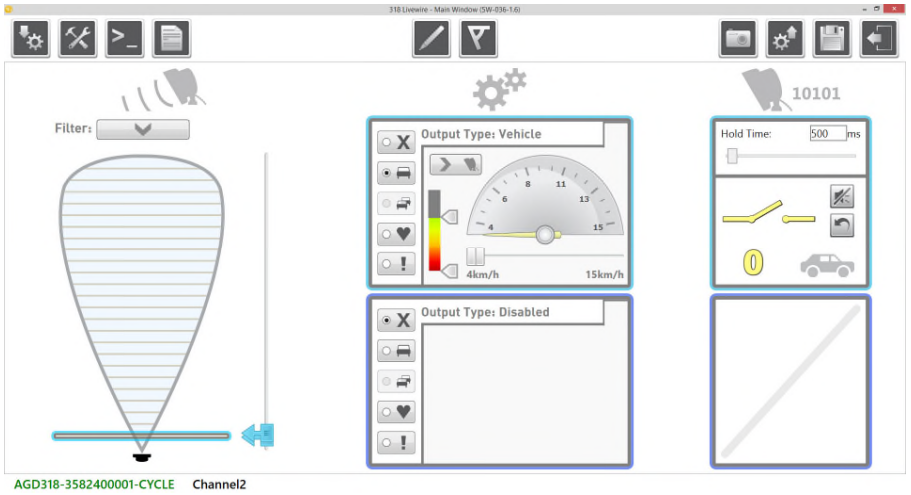
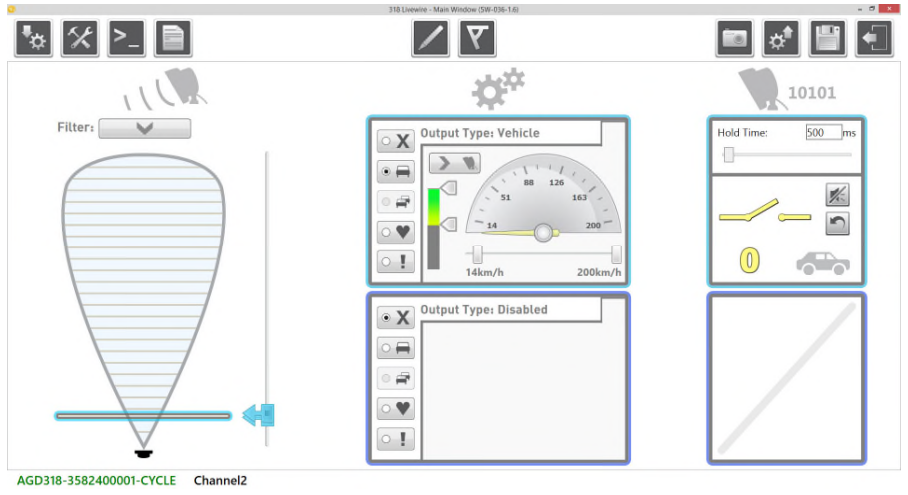
TRAFFIC CONTROL RADAR









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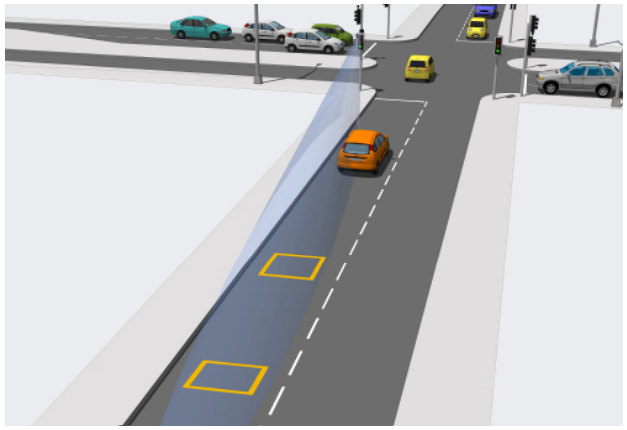
Summary

AGD 318
TRAFFIC CONTROL RADAR

- Can detect at set ranges like inductive loops
- Unaffected rain, lighting and foliage
- Masking is manageable
- Saving £10,000s on approaches
- Priority schemes now more affordable
- Increased network efficiency



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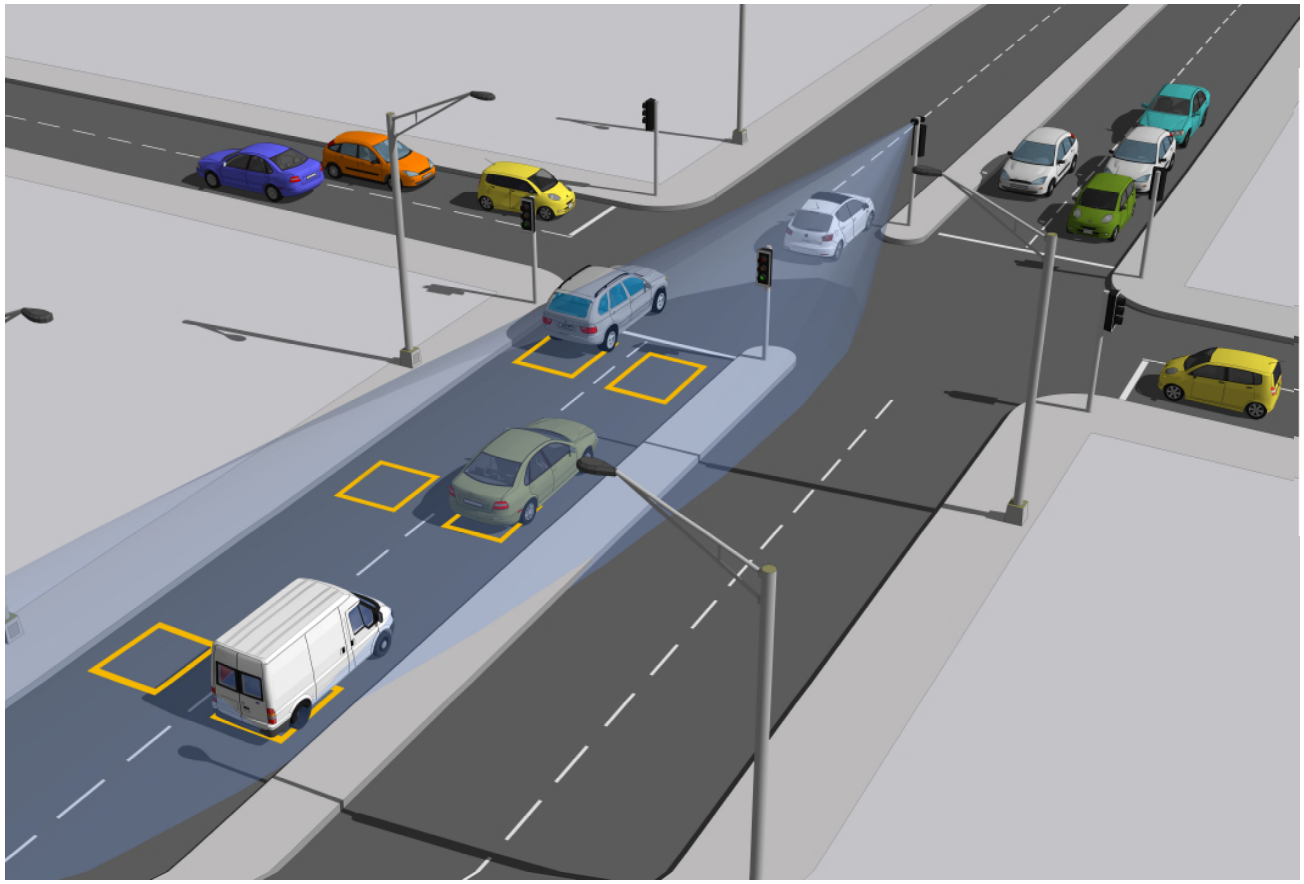
A New Release



AGD 350
TRAFFIC CONTROL RADAR

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AGD 350

TRAFFIC CONTROL RADAR

Integrated Traffic Services Ltd

Specialist consultancy to the road traffic industry

Grand Avenue, Mill Road: Worthing

AGD 318 case study

Full AGD 318 implementation under MOVA control

Why?

- Site needed upgrade to MOVA for increased performance.
- Mill Road is very busy and can have large platoons.
- Whilst currently ducted there was a desire to use a low maintenance system and test out the methodology for future schemes.
- Whilst ducting available some works would of been required to enable loop cutting and cabling due to age of site.

Full AGD 318 implementation under MOVA control

Cost Saving - potential

- Cost for this junction had it not been ducted would have been around 30k
- This includes ducting in hard ground
- Chambers / underkerb
- Slot cutting
- Traffic management

Full AGD 318 implementation under MOVA control

Benefits

- Reduced or no TM during build
- No downtime of lanes
- Ease of maintenance
- Allows carriageway / pathway works without disrupting detection
- Future adjustment without re-cutting

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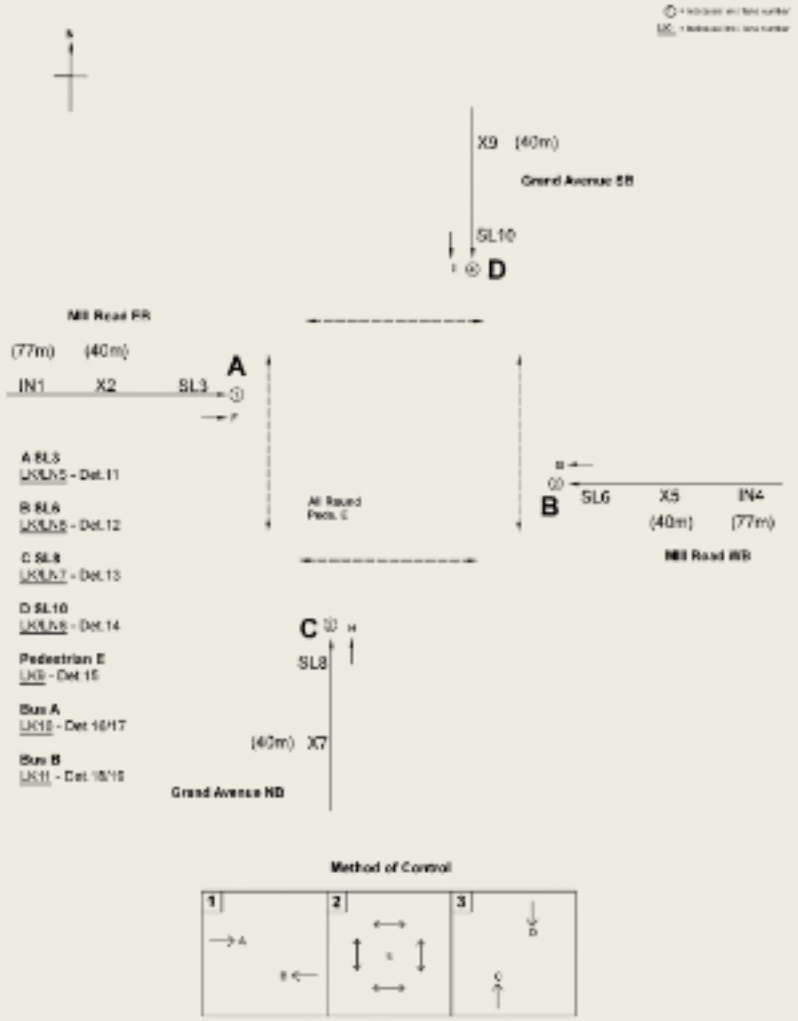
Full AGD 318 implementation under MOVA control

2220 Mill Road, Grand Avenue, Worthing:West Sussex

Method of Control, Detector Location, and Mova Lane / Link configuration



Method of Control

Issue A, Jan 2017

Full AGD 318 implementation under MOVA control

Design / Solution

- All IN/X loops are AGD318 radar.
- Loop detectors are used on each approach for stopline detection
- Conditioning from stopline Loops to mitigate the lack of stationary detect and low speed threshold of AGD318.
- Changes to normal MOVA Dataset setup / Validation

Full AGD 318 implementation under MOVA control

Conclusions post scheme.

- Scheme was a success
- No perceived lack of performance over loop MOVA
- Conditioning on stoplines not required for side roads on this junction.
- Methodology will be used on further schemes
- Care needs to be taken to observe behaviour and traffic patterns at junctions prior to deployment to ensure suitability or instruct mitigation measures.
- Be careful if sites are prone to exit blocking or have a large HGV content

Thank you

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Paper, case studies and more information:

agd-systems.com