

TrafficAngel - DRIVERPROTECT

low-cost, simple-to-fit, multi-functional AI human detection camera system designed specifically to protect drivers in their cabs

the challenge

If you were looking through 'Situations Vacant' and you saw a job described as driving 200 miles a day minimum, often sleeping at night in a tin box in laybys out in the middle of nowhere, the driver vulnerable to intruders and prowlers and possibly violent confrontation, would you apply for this job? Probably not. Yet this is what thousands of HGV drivers face each day and night as they carry out their vital delivery work keeping the country on its feet. Despite the importance of driver welfare, reliable statistics show us that freight crime is on the increase. And even when vehicles are parked up in designated, well-lit parking areas, drivers are still reporting attempted break-ins, diesel theft and cargo theft. So, what can be done to help drivers in such circumstances?

DriverProtect is a low-cost, simple-to-fit, multi-functional AI human detection camera system designed specifically to protect drivers facing such situations. From suspicious loitering around a stationary vehicle, migrants gaining entry into trailers at European ports, right up to organised crime thefts from moving trailers, DriverProtect can be tailored to meet each customer's individual requirements


the innovation

The solution comprises carefully designed electronics working in conjunction with human detection ai cameras that deliver a positive voltage out upon detecting human activity. TrafficAngel utilises that voltage out to power various deterrents. For instance....

IN-CAB PROTECTION: Unexpected footsteps outside the cab? But the driver is fast asleep? Our ai cameras never sleep and the camera and video device have already picked up the human activity and recording the entire event. To avoid false alarms from innocent passers-by, the integrated timer relay alerts the driver only after a sustained period of activity (usually 20 seconds but this is adjustable). Once the time is exceeded, a low intensity buzzer wakes the driver who can open their device and view the surrounding scene, and if necessary, push a button in the cab triggering a floodlight plus external audio warning. At the same time, the system can automatically alert management.

REMOTE ALERTING: drivers sleeping away from their cabs can receive a text alert as soon as the same activity is detected around the vehicle, can view the scene live, and remotely trigger the same floodlight and external audio warnings on the vehicle if the activity looks suspicious. Diesel theft, curtain slashing and illegal rear door entry can all trigger the same text alerts.

THEFT IN TRANSIT: for theft from trailers whilst the vehicle is moving, the same electronics can be implemented to trigger a non-tainting fog machine, filling the trailer and rendering further criminal activity impossible.



www.trafficangel.co.uk

Driver Protect

an affordable security product by

trafficangel
intelligent transport technology

how it was implemented

What started off purely as a cab-focused DriverProtect solution quickly developed into three key areas of freight security - driver welfare, cargo theft from stationary vehicles, and theft in transit. As a design company, we began by arranging meetings with key personnel within freight security, and with NAVCIS and the RHA. From the feedback gained, the basic DriverProtect electronics quickly took shape. The rudimentary system was fitted to a 1:12 scale truck and taken to knowledgeable people for feedback. It was the RHA we must thank for recommending a built-in delay to counter false alarms from passers-by. NAVCIS invited us to explain the basic DriverProtect system as part of its quarterly Teams outreach to 70-plus members.

Soon after this presentation, we were contacted by several interested parties, one company explicitly detailing their issues with theft of high value electronics from moving vehicles. This developed into our mobile CargoProtect system which includes full recording, full alerting,

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Components

 <p>2x AI Side Cameras Fitted above each door. Optional 2x more cameras.</p>	 <p>1x LED Alarm with Speaker Fitted outside on the cab.</p>	 <p>1x 4 channel DVR Used for recording with multiple cameras. 4G Connectivity optional.</p>	 <p>1x Internal Buzzer Used for alerting the driver when suspicious activity is detected.</p>
 <p>1x 7" monitor Fitted inside the cab. 5" option available.</p>	 <p>2x Scene Light Fitted above the camera. Extra lights will be needed for extra cameras.</p>	 <p>1x Control Unit Used to power the alert system and activates 20s timer delay.</p>	 <p>2x Switches 1 switch to activate the system, and another to turn on the audio-visual deterrent.</p>

plus ai human detection cameras which trigger audio/visual alarms plus if needed, a fog machine being triggered should a human enter the trailer/area whilst the system is armed.

After successful testing of the fog machine at 56MPH in open road conditions, CargoProtect has been recognised as making a significant and low risk contribution to theft on the move! For commercial and security reasons, we are reluctant to trumpet the CargoProtect system in the open market. But we are confident that word of mouth will soon bring customers to our door.

result

Since Driver Protect quietly launched, we have been working with TruckStopUK who has recognised the huge potential of the basic DriverProtect system and has told us we are the first company they wish to work with in this field. We are right now planning a Christmas promotional campaign with TruckStopUK and we wait to see where this takes us.

We are also hosting a meeting at our head offices in late November 2025 with a company which has already approved an early 2026 capex for numerous fog machine CargoProtect systems to help in their bid to tackle theft on the move.

The RHA is also fully supportive of many TrafficAngel initiatives and we enjoy a great relationship with key RHA personnel. We have a meeting with RHA insurance in December 2025 to discuss how DriverProtect and derivatives might help reduce insurance claims.

We are looking to begin our DriverProtect/CargoProtect supply only and supply plus install programme in early 2026 and hope for a huge success!.

conclusion

Freight crime is not going away. Innovation doesn't stop either and the TrafficAngel team has a good understanding of what makes a transport industry security product popular. Does the system do what it says on the lid? Is it driver-friendly? Is it bomb-proof/idiot-proof/waterproof/shockproof? Does the system have a competent and knowledgeable aftersales team behind it? We are confident the company and product meet all of these criteria.

LINK: <https://www.trafficangel.co.uk/>

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