

The Safety Concept of Vehicle Downlights, associated functions and suggested 'Keep Clear' area

The JBDL system projects an illuminated 'footprint' on to the ground to aid the driver to see what is in close proximity and help to establish vehicle positioning. The 'footprint' also doubles-up as a suggested 'keep clear' area for vulnerable road users (VRU's) and also work-related personnel.

Some driver benefits:

Easier to see when completing vehicle checks, visual margin for safer operation of vehicle when driving, easier to see when reversing in to dark areas, projects a 'keep clear' area to other road users to maintain safe handling of the vehicle, offers work-related personnel a 'keep clear area' when completing on-site manoeuvres, plus many more.

Vulnerable Road User (VRU) plus work-related personnel 'keep clear' area

If you have ever travelled on the train or in particular, the underground, you will know that there is a visible line along the platform which everyone is encouraged to stand behind, so as not to impede the more dangerous area that is in close proximity to the approaching train? This 'keep clear' area is a well-known practice and is in the interest of personal safety. The VRU, pedestrians and cyclists in particular plus, work-related personnel, when in the vicinity of large vehicles; E.G. whilst waiting to cross or use the road or when in the confines of the workplace, are faced with an identical scenario to the train example – **keeping a safe distance from the vehicle.**

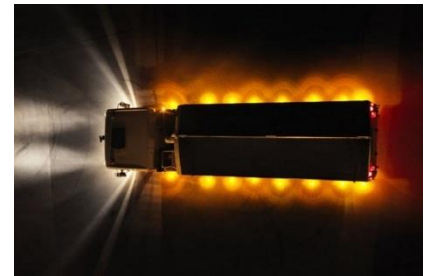


Often the vehicle may take an obscure line when turning and may not be understood by the VRU. However, the JBDL 'footprint' pertaining to the indicator being applied, will flash on the ground. This gives the VRU an additional visible warning to confirm the vehicle's intended change in direction, regardless of its road position but which may be a necessary action when maintaining the safe handling of the vehicle. See Highway Code Rule 221 'Large Vehicles Need Extra Room'.

Many injuries and fatalities regarding VRU's and work-related personnel are as a result of this dangerous area being impinged and because of the close proximity to the vehicle, it is not always possible for the driver to see if anything is within the danger area when carrying out the different complexities of a manoeuvre. It is for this reason that a suitable boundary surrounding the vehicle should be 'kept clear'.



If there was something tangible that can be seen and used by everyone as a definitive, to ensure their personal safety, this must surely help to reduce incidents, accidents and fatalities suffered by the VRU and work-related personnel.



Currently, some vehicles are displaying an illuminated 'footprint' along the sides of the vehicle as shown in the images. This offers a suggested 'keep clear' area which is continually available along the sides of the vehicle when in stop/start situations and in slow moving traffic. It is there for everyone to see and make use of daylight intensities permitting. So, by the VRU's keeping clear of the 'footprint' or suggested 'keep clear' area when a vehicle is approaching or turning, this would massively enhance the safe-being of the pedestrian and cyclist. Even if VRU's are distracted perhaps when using the mobile phone, listening to personal headphones or they could be hearing impaired, can see the downlight 'footprint' and react accordingly.



This safety suggestion can be achieved through good public communication and a change in behavioural habits.

Given the potent analogy to the tube train example and in the interest of road safety and work-related safe practices, vehicle downlights are a 'must-have' item on all larger vehicles.

