

# Seeing in the dark

A number of options to increase visibility of semi-trailers beyond the required minimum standards are now offered to operators.

Steve Banner sees the light

**V**ulnerable road users are less likely to collide with a trailer if it is clearly

lit and they can see which direction it is heading in. With that thought in mind, and eager to present a professional image, Schmitz Cargobull's customers are increasingly opting for side-marker lights that flash in time with the indicators when drivers signal they are turning left or right, says sales engineer, Geoff Ward. "The vast majority are going for them," he reports. "They make the entire combination far more visible."

In favour too are Schmitz Cargobull's optional SL2 rear safety lights, Ward adds.

Sitting at each of the top rear corners of a fridge trailer, for example, they include the brake light, indicator, rear light and position light in a single unit, and supplement the mandatory lights mounted on the chassis. As a result, the trailer is more visible to following traffic at night, says Ward, with the safety lights closer to the eye-level of truck drivers travelling behind than the chassis lights. SL2 is recessed into the top of the trailer's rear wall frame to protect it from damage.

Operators are more likely to favour supplementary lights now that LEDs have largely supplanted bulbs. Bulbs failed every so often, so the more lights



a trailer had, the more time had to be spent replacing them. LEDs, however, are noted for their longevity.

"Five-year-old trailers brought in as part-exchanges which are fitted with bulbs are having their lighting systems changed and LEDs fitted instead," Ward reports. That should make them more appealing to prospective purchasers, he believes.

It's a trend that has increased over the past couple of years, according to Ward, and the aforementioned repeating side-markers can be specified at the same time.

LEDs are being used to illuminate trailer interiors too, he says, with longevity in mind as well as the brightness of their light. "The days of opening the back doors on a fridge trailer and finding half the bulbs are out have gone," he observes.

If an LED does happen to fail, however, then replacing it is less straightforward than simply taking a

spent bulb out and popping in a new one, Ward warns. What Truck-Lite describes as its 'intelligent' Model 900 rear lamp incorporates a device that alerts drivers to an LED failure, along with an optional sensing stalk designed to aid them when they are backing up to a loading dock.

Aside from their longevity and brightness, a further advantage of LEDs is their low power consumption. "It is minuscule compared to that of bulbs," says Phil Lloyd, head of engineering policy at Logistics UK (formerly the Freight Transport Association).

## SIDE VISION

Amber side-marker lights are also being combined with down-lights that cast an amber pool of light around the vehicle. That is the latest development from Jimmy Beam Downlights under the Vehicle Avoidance Lateral Light banner, with both lights installed in a single unit (pictured above).

## ECE REGULATION 48 LEGAL REQUIREMENTS FOR SEMI-TRAILERS

- Front clearance lamp (two, white) for trailers more than 2.1m wide
- Front position lamp (two, white)
- Front reflectors (white/colourless)
- Side reflector/s (amber)
- Side marker lamp every 3m (amber or amber to front, red to back) for trailers longer than 6m
- Side conspicuity markings
- Rear reflectors, two (red)
- Rear direction indicators, two (amber)
- Tail lamps for category R1 and R2 trailers, two (red)
- Stop lamps for category S1 or S2 trailers, two (red)
- Reversing lamps, two (white) for trailers longer than 6m
- Rear fog lamp for category F, F1 or F2 trailers (red)
- Registration plate lamp (white)
- Rear contour lamps for category R, R1, R2, RM1 or RM2 trailers more than 2.1m wide, two (red)
- Rear conspicuity markings

Source: Hella ([www.is.gd/okafug](http://www.is.gd/okafug))  
See also MOT advice: [www.is.gd/fezah](http://www.is.gd/fezah)

They can flash in conjunction with the indicators, with the lit pool extending approximately 1.25m to 1.5m from the trailer's sides. Up to eight of the combined units are likely to be required on a 13.6m semi-trailer, says the company.

It has been marketing standalone down-lights fitted to the underside of vehicles for several years. Down-lights can warn cyclists, motorcyclists and pedestrians to keep clear of the vehicle's sides, says the firm, and can make it easier for the driver to spot them if they fail to do so.



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Geoff Ward

They also help drivers see kerbs and roadside furniture when negotiating junctions and roundabouts JBDL adds, and provide additional illumination during early-morning daily checks or if a tyre fitter has to work on the vehicle at the roadside at night.

Better lighting makes it easier for other road users to see the truck after dark, in misty or foggy conditions, and in spray, and brings security benefits too. It can assist the driver when the trailer is being manoeuvred into sometimes poorly-lit loading bays at night.

While down-lights may be of benefit, LEDs mean that the latest marker lights make a trailer stand out clearly at night.

“We’ve developed the maximum-intensity Unipoint Maxx side-marker, which at 25 candelas is very bright indeed,” says Aspoeck’s UK managing director, Lee Rush. It is pictured below. “In the past side-markers were low-intensity, at no more than 0.4 to 0.6 candelas.” (A candela is the SI unit of luminous intensity; unlike the related lumen, its magnitude does not depend on the angle of incidence).

### REVERSING AID

Making reversing in yards easier and safer is the key benefit of Labcraft’s Banksman lighting system, says the company. Mounted beneath the chassis, it employs high-intensity white lights that are classed as supplementary low-speed manoeuvring lamps rather than reversing lamps under ECE Regulation 23. They provide a pool of illumination intended to aid drivers when they are backing up in, for example, distribution centres after dark.

Banksman can also be employed in yards at forward speeds of up to 10kph. That makes it useful if a driver is trundling around the outside of a large warehousing complex attempting to locate the correct loading bay, and trying to dodge stray pallets and other obstacles at the same time.



It is not intended for use while the truck is in motion on the public highway.

Users include food and drink distributor Lenham Storage. It has had Banksman lamps fitted on each side of its trailers, positioned below the side raves behind the rearmost axle. “A good proportion of our deliveries to premises are made during the hours of darkness, especially during the winter months, where there are many potential hazards in the form of low bollards, signs, other vehicles and of course people,” comments fleet manager, Steve Emsley.

Labcraft additionally markets the Si9 Scenelite, which can be used to cast light on a tail-lift if it is being used after dark.

Staying with tail-lifts, Dhollandia has come up with LEDs which can be positioned on the underside of the platform. They employ lenses which bundle and emit intense strips of coloured light when the platform is lowered in order to indicate its working area in a bid to prevent accidents. The system had yet to be launched commercially at the time of writing.

Uncouple a trailer and leave it in a lay-by overnight un-illuminated and there is always the risk that a motorist will not see it, and drive into it. Aware of this risk, Hella has come up with a battery-powered lighting package – Park Safety Fix (PS-Fix) – developed in conjunction with German trailer builder Hufferman, which should hopefully prevent this from happening (pictured above). The system only activates when the trailer is de-coupled. [TE](#)