

Hella are launching their next generation of lighting technology under the moniker "SSL | HD" (Solid State Lighting, High Definition). Behind the name: Hella have miniaturised the light source so 15,000 LED pixels can now be individually and intelligently controlled. A first series order for the integration of the technology into a headlamp has already been successfully acquired and should see the dark of night on the road in the next three years.



What it all means is that Hella have integrated very small, individually-switchable LED pixels on intelligent driver chips. By controlling the individual pixels, the light distribution on the road can be generated directly at the light source surface and projected onto the road via a multi-stage optical system. The higher number of pixels and the enlarged light-emitting surface allow new applications with higher light quality and performance.

The technology thus provides the basis for freely programmable lighting functions. Additional safety functions such as optical lane markers or further individualisation possibilities such as welcome and farewell animations or communication functionalities can be implemented by high-precision digital pixel switching. In addition, the SSL | HD technology enables the development of new business models: Hella offer automakers the opportunity to develop new business models on a pay-per-use basis. In this context, certain lighting functionalities are generally delivered in the vehicle, but are only activated and paid for on request in line with individual user requirements.