

PRESS RELEASE

Smart solutions tailored to new driving systems

- *The Basque technology centre Tekniker is involved in the design of a sensor device that can distinguish between people and traffic signals.*
- *The electronic solution, crafted and manufactured by Masermic, brings together artificial vision and 'deep learning' to provide assisted driving that is safer and more autonomous.*
- *The Oribay company has installed this system on a compact multi-camera bracket for windscreens that features a proprietary plastic solution.*

[Eibar, September 19, 2023] – The main goal of ADAS (Advanced Driver Assistance Systems) is to improve road safety for car passengers and people on foot. The implementation of these systems poses a significant technical challenge that does not only require the development of new technological and electronic solutions but also enhanced designs to achieve miniaturisation.

In order to address these challenges, the Gipuzkoa-based firm [Masermic](#) has developed a device with the support of [Tekniker](#) through its expertise and experience in terms of designing and developing electronic hardware, optical sensors and artificial intelligence (AI) for system cameras.

As explained by the Tekniker researcher David Cantero, “thanks to our solutions it is possible to detect people on foot, read traffic lights or signs to guarantee their safety. This information is transmitted together with a video sequence to the vehicle’s electronic control systems to make assisted driving safer and autonomous”.

The resulting data contain highly valuable information that can be used, for instance, to trigger an alarm regarding the presence of other nearby vehicles or pedestrians as a warning to reduce speed according to road limitations or traffic light signalling.

Thanks to different autonomy settings the system can trigger alarms for drivers when facing these situations or take over vehicle controls to respond in an anticipatory manner and avoid situations of danger.

The solution designed by the technology centre equipped with artificial vision and deep learning aims to improve the efficiency and effectiveness of ADAS systems. It is also part of the electronic system manufactured by Masermic.

As the progressive incorporation of more technologies in these systems has made them bigger, great care is being taken in the design and development stages to miniaturise these units so they will only take up a minimum amount of space on a windscreen and not interfere with the visual field whilst driving.

The incorporation of more and more technologies into these systems means that their size is increasing. For this reason, special care has been taken in the design and development of the miniaturization of the assembly so that it occupies as little space as possible on the windshield and does not interfere with the field of vision while driving.

This vision system, developed and manufactured by Masermic, has been incorporated to the SmartBracket made by [Oribay Group Automotive](#) pursuant to the company's current approach with regard to digitising their car solutions.

Tekniker has made available its capabilities in terms of multi-functional services, nano-additivation and optical systems to deliver unique integrated products.

More about Oribay

Oribay Group Automotive has more than 30 years of experience in researching, designing and manufacturing solutions for cars.

Specialised in windscreens, the company has collaborated with leading manufacturers of OEM/AGR windscreens. It was in the late eighties when Oribay designed and manufactured the first brackets for rear-view mirrors bonded to windscreens that were followed by other models for light and rain sensors, windscreen brackets, SBT adhesives and electronics.

More about Masermic

Masermic, a company that is part of Grupo Oribay and headquartered in Mendaro, specialises in designing and developing high-added value electronic systems for the mobility and renewable energy sectors. With more than 20 years of experience, Masermic offers “turnkey” engineering solutions for different industrial processes.

More about Tekniker

Tekniker is a technology centre that specialises in advanced manufacturing, surface & material engineering and ICTs for production. Its mission is to further growth and wellbeing via R&D&I in society as a whole by furthering the competitiveness of the industrial fabric in a sustainable manner. Tekniker is a member of the Basque Research and Technology Alliance (BRTA).

More information:

GUK ▶ Unai Macias

unai@guk.eus | Tel. 690 212 067