

## Cdatik

# Improve efficiency, safety and comfort 


#### Abstract

DATIK IS A PIONEER IN THE DEVELOPMENT AND INTRODUCTION OF ADVANCED TECHNOLOGICAL ASSISTANCE, INFORMATION AND DRIVING CONTROL SYSTEMS THAT help save on fuel and minimize the RISK OF DISTRACTION AND COLLISION BY DETECTING AND PREDICTING SITUATIONS THROUGH ARTIFICIAL VISION TECHNOLOGY, THEREBY helping to promote more reliable, SAFE AND EFFICIENT DRIVING.


MagicEye is an advanced technological assistance system that helps to minimize the risk of being distracted and collisions through detecting and predicting situations using artificial vision technology that contributes to safer driving.

The system includes features such as obstacle and road sign detection, safe distance calculation, involuntary lane changes, speed limit warnings and driver fatigue alerts.

It also offers an important competitive advantage with regard to other conventional products which only focus on warning the driver. It includes image recording, a warning and event register, as well as transmitting information to a central unit from a web platform which draws conclusions and processes all of the information gathered to detect any driving offences, plan the safest routes and optimize driving habits. These features make MagicEye a total solution designed for fleet management.

Attractively designed, the system has a camera, a processing device and a warning system that can be either audible or visual, or both at the same time. Other, more selective, alert mechanisms are currently being developed, such as seat vibration, to avoid disturbing passengers when the warning
is given. Installation is very straightforward and can be customized according to the client's needs in terms of finishes and visual warnings to perfectly integrate into the coach's dashboard or the fleet management platform.

EcoAssist is a fuel-saving solution that shows the driver a series of instructions that optimize his or her driving style. EcoAssist is based on different types of information (the vehicle's location, the driver's driving style, orographic maps and GPS sensors), and an expert system that combines this information and, using the vehicle's consumption models as a guide, learns and generates instructions. These instructions are shown the driver, discretely, so as not to distract him or her, at a moment when a rapid response is possible.

These solutions unquestionably improve safety, passenger comfort and client reliability and profitability.

## Active safety as a service or solution

- Customized active security, incorporating the features required by a client.
- Turnkey projects that adapt technology to the client's specific needs.
- Possibility of remote management of active security devices, as an added vehicle feature with this service.
- Information provided when the driver deactivates the system.
- The system can also give warnings (including correctly signalled lane changes) in specific areas determined by GPS coordinates.


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## MAGICEYEIS AN ADVANCED TECHNOLOGICAL ASSISTANCE SYSTEM THAT HELPS TO MINIMIZE THE RISK OF BEING DISTRACTED AND COLLISIONS THROUGH DETECTING AND PREDICTING SITUATIONS USING ARTIFICIAL VISION TECHNOLOGY.

Datik become part of lrizar Group in 2011 and has recently developed a software platform for infrastructure management and optimum service planning that can be used for railways, trams and buses, and a platform for improving user mobility orientated around sports events, creating optimum routes based on a match calendar.

## Infrastructure management and service planning

This technological platform provides benefits in different areas within the organisation.

## Integrated solution:

Total integration with the centralised operation system, applicable to railways, trams and roads. Integration with administrative and operational departments.

## Modernisation of management:

We have created new management processes and have withdrawn the use of paper for planning activities.

## Cost calculation and resource optimisation:

Operation-related cost calculations and the automatic assignation tool,make it is easier for the operator to reduce operating costs.
Centralised infrastructure management:
Instant adaptability to works or new route creation. Independent from map providers.

