VISTA VELO

2MEMS3 Universal Design Innovation

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Group 4

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Overview

Our product is a blind-spot detector for cyclists designed to enhance road safety. Using LIDAR sensors, the system detects vehicles up to 15m behind the user at 45-degree angles. These sensors, mounted under the saddle, connect via Bluetooth to a handle-bar mounted circular LED display which lights up to alert the rider. The closer the vehicle, the more intense the alerts, allowing cyclists to stay focused on the road ahead while staying aware of their surroundings.
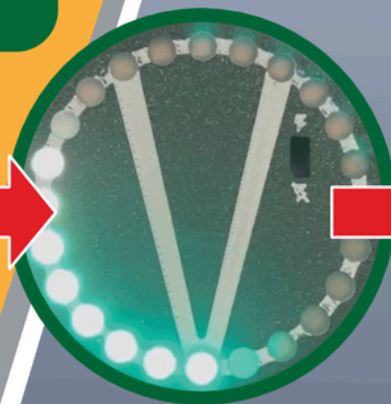
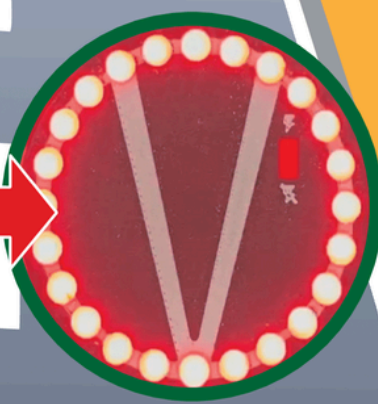## See Beyond The Blind Spot!

Features

The sensors are slid into place behind the saddle and the system is turned on by the switch on the circular LED.

A vehicle is detected approaching the left side of the bike, the LEDs begin to light up green as it gets closer, alerting the cyclist.

The vehicle approaches very close to the bike. The LEDs blink red to alert the cyclist not to veer left.

Our Mission

'To Improve the awareness of cyclists and reduce on road collisions by alerting our users of vehicles in their blind spots'.

The Problem

Over 1600 Irish Cylists have suffered serious crash injuries over the last 7 years. -(RSA.ie)

'I couldn't see the car come up behind me and suddenly I was on the ground'. - Cyclist

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