

For the blind, a device on car window delivers haptic experience of scenic view

May 3 2018, by Nancy Owano



Credit: Ford

Sometimes the journey is worth more than the final destination. Car travel can offer the simple pleasures of looking out the window and enjoying the scenic views. Green fields. Waterfronts. Grazing animals. Mountains—all assuming you are sighted, that is.

For the blind and visually impaired, it would seem that enjoying the view from a car passenger seat would be out of the question.

Ford's technology visionaries thought otherwise.

What if? They thought up smart windows, to create a haptic visual language of scenery.

Ford recently presented a video introducing Feel the View, a prototype smart [car window](#) that the passenger who cannot see can feel and appreciate in what the view is all about.

A special [device](#) goes to the top of the passenger window, and it has a camera facing outside.

Joel Stocksdales at *Autoblog* walked readers through how it works.

"Press a button, and the system takes a picture of the current view. That picture is converted to black-and-white, and different shades become different levels of vibration. The device also tracks the person's finger, and will vibrate differently as the finger passes over different parts of the image as if it were projected on the window. In addition to the vibrations, the device has technology that allows it to recognize the basics of the view and provide an audio [description](#)."

The Ford device transmits up to 255 levels of vibrations on the car window. After a built in camera takes a picture of the view, the picture is converted to a gray scale image. Each shade of gray is translated into a vibration of different intensity on the car [window](#).

As for the audio description, a vocal assistant is connected to the car's audio system, by an online AI. This can help the person put the image into context.

The FordEurope blogspot also had details: "Feel The View takes pictures that are turned into high-contrast monochrome images. These are then

reproduced on the glass using special LEDs. By touching the image, different shades of grey vibrate with a range of 255 intensities, allowing passengers to touch the scene and rebuild in their mind the landscape in front of them."

The video introduces several people, including a man who says he likes to travel like Ulysses, knowing everything that he can.

If you could see one thing, what would it be? One woman laughed. Another said, the sunset. Other answers included Brunelleschi's dome and a snow-capped mountain.

Partners for Feel the View in Italy involved agency GTB Rome and local startup Aedo. The latter was reported as a startup specializing in devices for the visually impaired. GTB Rome commented on the Aedo Project, in *Adweek*. Federico Russo, executive creative director of GTB Rome, said, "The haptic interface implemented on some of their projects has opened up an all new world for us, allowing us to [think](#) like blind people would do."

No details were provided on when such a device would come to market or the pricing, said several reports. According to *Alphr*, "It's not clear how much further testing is required before Feel the View progresses from prototype to being a standard option when purchasing a new car from Ford," said the report, "but it's encouraging that Ford is investing in ambitious in-car technology that will totally transform the experience for passengers with visual [impairments](#)."

More information: [fordeurope.blogspot.com/2018/0 ... indow-for-blind.html](http://fordeurope.blogspot.com/2018/0...indow-for-blind.html)

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