

## Automotive Manufacturer Selects 3M Dispersive Signal Technology for Showroom Product Selector

### The Application

Automotive showrooms are adding digital signage and product selector applications to their sales and marketing efforts. These product selectors are designed to enhance and improve the showroom experience, create advertising opportunities, broadcast promotional activity and sell “adder” products such as floor mats or upgraded tire/rim combinations, which can result in increased dealer revenue and profit. The showroom experience is improved by customers utilizing interactive technology during the selling process so that information is passed accurately, consistently, and in a timely manner between customer and dealership. Product selectors can be utilized throughout the dealership in car sales activity, service and part centers and adjacent product information such as financing, insurance and registration. Large-format product selectors typically range in size from 19 to 46 inches displays with touch technology either built into the LCD display or attached externally.



Figure 1: Product selector using 32" DST2270DX System.

### The Problem

One of the world's largest automakers wanted to improve sales of highly-profitable car and truck accessories at their dealerships and to change the way customers engage their sales organization, service department and parts business. This automaker chose to implement a touch-enabled 32-inch LCD housed in a large point-of-purchase display. In addition to providing customers with new and creative ways to engage with the dealership, the interactive display was intended to support the sales and service teams during peak traffic times by allowing potential customers to begin the sales process at the display while waiting for the next available team member.

When choosing a touch technology, the automaker required one which was responsive, accurate, reliable and required only routine cleaning for maintenance. In addition, the touch technology needed to maintain its operational performance in the presence of everyday contaminants found in their environment. The touch technology also needed to be integrated seamlessly into their point-of-purchase display.

### The Solution

3M offered the 3M™ MicroTouch™ System DST2270DX as the optimal solution for this application. This touch system was specifically designed to be easily integrated into many display choices, giving the automaker the ability to specify the display performance required for their application. Competing solutions limited both display and touch technology options requiring the customer to make trade-offs on the display quality or touch technology performance.

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3M™ Dispersive Signal Technology (DST) functions by analyzing the bending waves traveling through the chemically-strengthened glass touch surface, resulting in >99% touch response accuracy. Since the bending wave travels through the glass, touch performance is not affected by on-screen containments such as dust, dirt, moisture, oil, or grease (see figure 2), which are typical in high-traffic, public environments such as automotive dealerships. The DST2270DX system requires no maintenance beyond routine cleaning for aesthetic purposes, whereas competing active surface technologies such as infrared beams (IR), surface acoustic wave (SAW) and optical (camera) require a contaminant-free surface for proper operation. This limitation of IR-, SAW- and camera-based technologies requires a special cleaning process that ensures the cameras, transducers and reflector patterns are free from contaminants (see figure 3-5).

## The Result

After an initial pilot with a competing SAW technology, 3M DST was selected for a second pilot. The second pilot resulted in 3M securing a 600-piece installation across the U.S. dealer network. The installation has been successful with no field failures identified as "touch screen faults" in over one year of operation and no downtime associated with the touch displays. There have been no reported required calibration incidences or touch performance issues with the DST systems. 3M DST's outstanding touch performance and low maintenance operation has proved to be a winning combination for showroom product selectors.

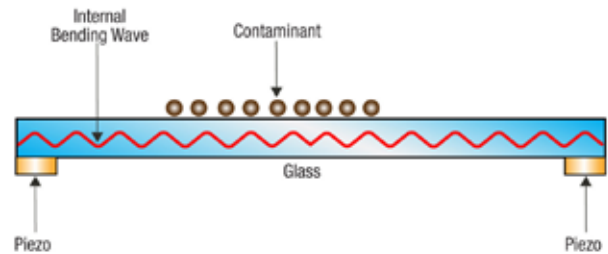


Figure 2: Dispersive Signal Technology (DST). Waves travelling through the median of the glass are unaffected by objects on the surface.

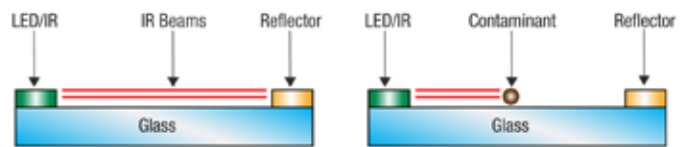


Figure 3: Infrared (IR) Beam. Objects may block IR light.

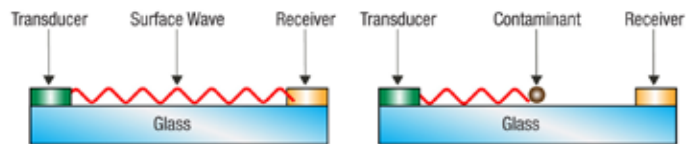


Figure 4: Surface Acoustic Wave (SAW). Objects may absorb sound wave.

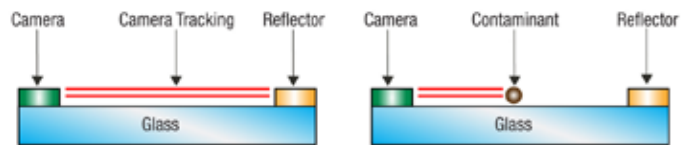


Figure 5: Optical. Objects may block camera tracking.

### 3M Touch Systems

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