



## Helping Automotive OEMs with their Brand Image and Bottom Line

### Introduction

*Just an infotainment system? Not really.* Infotainment systems in today's vehicles are at the epicenter of the consumer driving experience, providing entertainment control and status displays for vehicle functions and presenting an OEM's brand image. By blending camera systems, connected device interfaces (USB, Bluetooth, etc.), and voice-activated controls with traditional navigation and radio/SiriusXM, infotainment systems are engineered to be increasingly functional and intuitive. Infotainment systems have even become a focal point of annual consumer-driven JD Power ratings and a reflection of their interaction in the cockpit.

Recently, an OEM customer using Danlaw's automated testing solutions reported holding back 10,000 vehicles from shipment because a random blank screen would appear on the infotainment system. It would occur with hours or days of continuous operation. The OEM needed a way to decrease the time between failure in order to find the root cause of the problem.

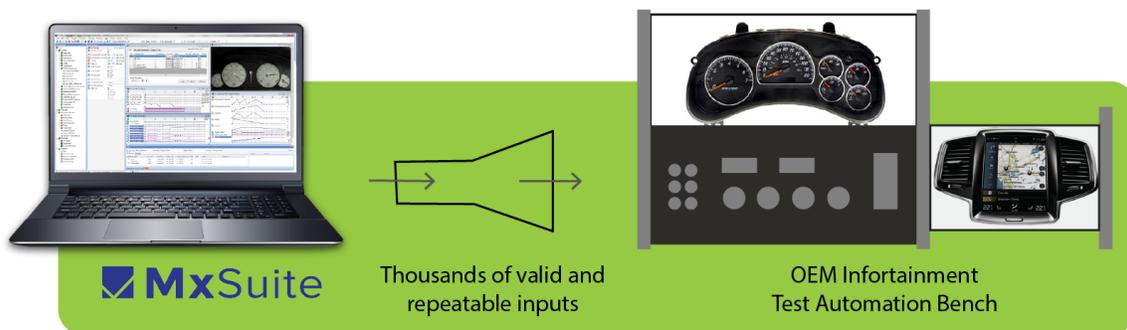
### Solution

The OEM relied on their Danlaw Automated Test benches, which were built on extensive experience from designing thousands of bench testers for a variety of customers. Running Danlaw's Mx-Suite Test Automation software, it allows test engineers to simulate how the driver and vehicle electronics might operate with an infotainment system in real time. Mx-Suite randomizes the inputs to the head unit and systematically monitors the response before rendering a pass/fail verdict.

The OEM engineers focused their bench testing on test cases involving the blank screens, and within a few days made the problem deterministic and reproducible. The root cause was sent to the supplier to generate a fixed solution. The new application was brought back to the automated test bench and confirmed the fix was robust.

### Conclusion

As a result, the code was flashed into the 10,000 vehicles and the vehicles were released for shipment to the dealerships. The Danlaw Automated Test benches with Mx-Suite helped resolve a problem within a few days instead of a few months. The savings to the OEM were significant. Add in the costs for product warranty and related liabilities and the issue had the potential to cost the OEM billions of dollars. The quick resolution directly impacted the company's bottom line and the preserved the customers' experiences.



### Contact Us

If you would like to learn more about Danlaw's automated testing solution, please contact our team at [sales@danlawinc.com](mailto:sales@danlawinc.com).