

Automating Radio Test with LabVIEW, TestStand, and PXI

Customer

A manufacturer of high-performance car audio systems

Challenge

Increase throughput of radios that are tested and processed by the service center.

Solution

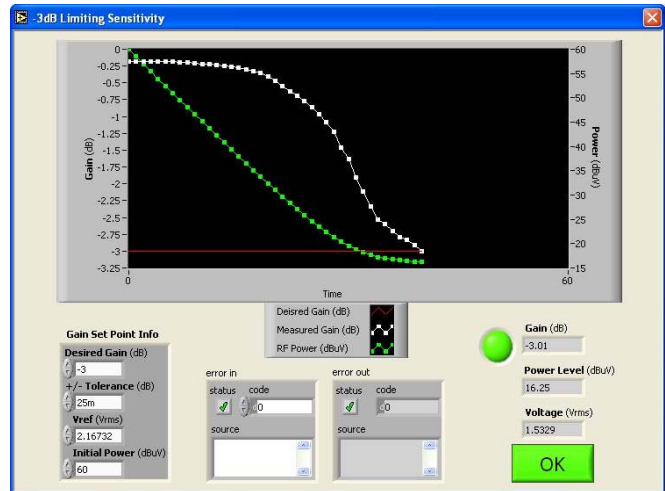
Replace analog technology with digital technology and automate test procedures.

Key products used:

- National Instruments (NI) LabVIEW
- NI TestStand
- NI PXI-1045 chassis
- NI PXI-8186 embedded controller
- NI PXI-5670 RF vector signal generator
- NI PXI-4461 dynamic signal acquisition module



In this radio test system, the PXI-5670 RF signal generator modulates the FM, AM, and WB signals. The PXI-4461 DSA module acquires the audio signals. The PXI-8186 controller runs the test software.



The test modules, created in LabVIEW, are managed and executed by TestStand. The -3 dB limiting sensitivity test performed in the FM test series is shown above.

Benefits

Automating the test procedures dramatically reduced manual labor and substantially improved measurement accuracy and repeatability. The modular test software also enabled custom radio tests to be performed as specified by OEM customers.

To achieve similar results, contact our office nearest you or visit www.bloomy.com.

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