



L3HARRIS™
FAST. FORWARD.

STAY MISSION READY

Level 3 Tactical Radio Maintenance System

TEST AND REPAIR TO FACTORY-LEVEL SPECS

In today's dynamic digital battlespace, tactical radios have to be ready for deployment at any moment. Supporting this real-time mission readiness demands in-field test and repair capabilities that keep pace with rapid changes in radio technology.

Wideband waveform radios require more sophisticated testing techniques than narrowband radios, and are packed with many new features requiring additional hardware and software to ensure rapid, thorough and consistent results.

L3Harris, a global leader in tactical radio technology, has solved those challenges—and more—with the Level 3 Tactical Radio Maintenance System. At its core is the revolutionary RF-7801 tactical radio test platform, with Assemble/Disassemble and Seal Integrity stations that give users cost-effective, direct control of radio maintenance in a dramatically reduced footprint.



TEST AND REPAIR IN FIELD TRUST IT ON YOUR MISSION

L3HARRIS RF-7801 TEST SYSTEM CONFIGURABLE AND AUTOMATED



The L3Harris RF-7801 is the industry's most capable, flexible and scalable synthetic test instrumentation architecture available. It is the only system today to conduct testing on current narrowband and wideband radios as well as next-generation multi-channel radios.

The test system lowers costs and supports fast turnarounds by significantly reducing the components required due to standard and customized testing.

This new platform integrates proven software and world-class hardware, incorporating decades of field experience and customer feedback on military and commercial communication products.

The RF-7801 automatically tests over 25 L3Harris products, with manual testing capabilities for radios from other suppliers.

The transit case configuration provides mobility for field use. The bench installation supports a permanent or semi-permanent test operation.





THE RF-7801 AT A GLANCE

BENEFITS

- > Automated testing delivers repeatable Single platform tests narrowband and wideband radios
- > Automated testing delivers repeatable results, reduced test times and readily available data analysis
- > Incorporates the latest factory test techniques and meets future tactical radio evolution requirements
- > A second radio is not required for back-to-back testing

FEATURES

- > Available in an integrated station or transit case configuration
- > Supports unique wideband requirements associated with Software Defined Radios, including 16QAM and BERT
- > Common platform architecture designed to support upgrades, add-ons and future instrumentation requirements
- > High performance, 90 MHz instantaneous bandwidth for frequency hop burst analysis
- > Excellent phase noise performance across a 2.6 GHz range of operation with fast hopping capability
- > Advanced, real-time processing power and state-of-the-art data transport mechanisms
- > Ability to configure support for advanced communications systems including JTRS, JTRS-compliant/SCA systems, and several emerging standards for 4th generation wireless communications
- > MicroATE option with built-in signal switching capabilities for fully automated testing
- > MIL-PRF-28800F Class 3 Packaging
- > Highly intuitive, 12.1-inch, high-resolution, touchscreen-based user interface provides access to all hardware and software stimulus and measurement capabilities
- > Functions include configuration testing automation programming, data analysis and archiving, calibration, system diagnostics and manual operations



L3HARRIS ASSEMBLE/DISASSEMBLE STATION

The L3Harris Assemble/Disassemble Station provides a compact and convenient work surface for the removal and replacement of L3Harris radio modular components, including printed circuit boards, cables, power amplifiers and couplers. All necessary tools are supplied and stored in custom foam cutouts for easy location and inventory. The station is also equipped with Electrostatic Discharge (ESD) work surfaces, a PC to access electronic instructions, a magnifying lamp, chair, power strip and Uninterruptible Power Supply to protect equipment from power surges, spikes and interruptions.



L3HARRIS SEAL INTEGRITY STATION

The L3Harris Seal Integrity Station's two-stage process verifies whether a Line-Replaceable Unit maintains a watertight seal after repair. The first "dry" stage tests for gasket issues using state-of-the-art mass flow technology to simulate submersion while maintaining a constant pressure on the unit. If a leak is detected, the second "dunk" test uses positive air pressure and water submersion to accurately locate the problem area for repair. This self-contained subsystem is equipped with ergonomic ESD work surfaces and all the tools and equipment needed for seal integrity testing.

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Stay Mission Ready - Level 3 Tactical Radio Maintenance System

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