

## **Release Notes**

### **HV System Release 12.21.407**

January 2026

#### **Component Version**

- NX Tester Firmware Version: 12.21.407
- HV Controller Board Version: HV\_5\_xx\_16.nxhp4

#### **HV Specific Firmware Features and Enhancements**

- Support for Instek 12003 unit which includes ramp down function, increased maximum IR resistance value, and increased maximum IR voltage value.
- Updated HV header variables to include ramp-up and ramp-down data (ramp-down is not supported by the Instek GPT-9803 and will not appear in results).  
Added HV header variables to separately display AC and DC dielectric withstand data when both are used in the same test.

\$TPW – last HV test parameter set, any test type

\$TPA – last HV AC test parameter set

\$TPD – last HV DC test parameter set

\$TPI – last HV IR test parameter set

- Extensive improvements to the HV diagnostics and internal communication protocols. Diagnostics have been expanded to reduce Bank Relay errors, as well as various communication errors between devices.
- Added Error Code 657 – “*Unrecoverable communication error – Restart test.*”.  
Previously, Error 647 was used for all device communication errors, even when devices were functioning correctly. Error 657 now specifically indicates communication loss caused by interference across tester to expansion box ribbon cable and recurring strong arcs or corona from the test fixture or table.

#### **Additional Firmware Features and Enhancements**

- Enhanced Fixture Block Workflow Item to determine the connector presence if continuity exists on any of pin within the fixture block.
- Enhanced “Post Assembled Parts” function (located in Connections View, Group Properties) to accommodate advanced complex circuits.
- Improved test time performance with specific types of large splice groups.
- LED Guided Applications: Ability to disable the check for early removal in the LED Guided detection switch mode.
- Report – “Display Report on Tester” option displays unreadable text. This issue was introduced in version 2.21.377 (08/2023).
- Fixed issues where the LED Module (5-1303) does not light LED's when used with a tester with a 64 test point board (5-4001) installed.