

### THE FAVORED UNDERDOG HAS GOTTEN EVEN BETTER

The HA7062B has the same look, the same interfaces, and the same price as the HA7062A. What got better is the addition of automated residual measurement capability, a more advanced front end, and an extremely clean external power supply (allows for powering via a 12V battery). Everything included in the revised HA7062B has further increased measurement sensitivity capability. Users can be confident in test results due to a NIST traceable calibration.



**RAPID CROSS CORRELATION COVERING 5MHz - 6.4GHz**

### INTUITIVE INTERFACE

Holzworth Instrumentation has been measuring the phase noise of 100% of its own shipped products since the company was founded in 2004. There is an understanding that the user interface is as important as the capabilities of the actual hardware.



The highly intuitive HA7062B interface is a driver-free, JAVA™ based GUI that will operate on any standard PC. As pictured, the GUI has been optimized to be touch screen compatible.

Originally targeted for use in high throughput manufacturing, the HA7000 Series GUI is designed to work seamlessly under the control LabVIEW™ or other software suites.

### Z540 NIST TRACEABLE CALIBRATION

Make no assumptions. Accuracy of results is a common speculation for any phase noise analyzer. Beyond architecting with a high isolation front end, all Holzworth analyzers come with a NIST traceable calibration. The ANSI z540 calibration standard is a mandatory procedure for Holzworth phase noise analyzers. Phase noise data that cannot be traced to an industry accepted standard leaves too many variables open for interpretation.

### ARCHITECTURE OUTLINE

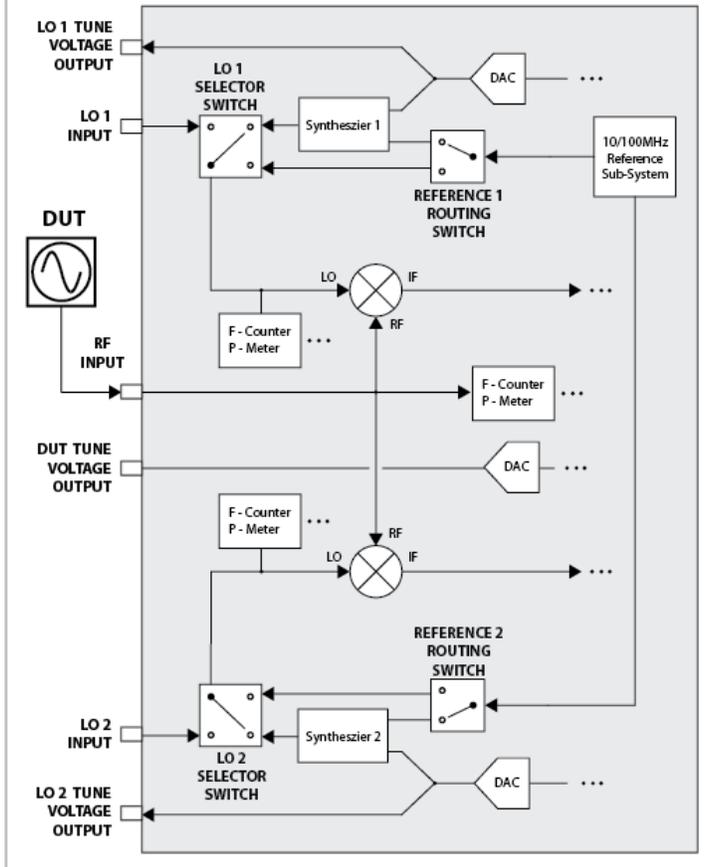
The HA7062B core combines the best of traditional analog phase noise measurement front-ends with the latest technology in cross correlation analysis. The digital analysis system uses an advanced DSP with a powerful cross correlation engine. 3 LO Modes help to achieve industry leading phase noise levels at the fastest possible acquisition speeds:

**1. INTERNAL LO MODE** uses a pair of high performance RF synthesizers for LO generation. Their non-PLL architecture is extremely stable, ensuring a fast and solid DUT phase lock, every time.

**2. INTERNAL LO BYPASS MODE** is a powerful function that provides the lowest possible noise floors for DUTs at 10MHz and 100MHz. This automatic feature bypasses the onboard synthesized LOs, to use the system's internal references.

**3. EXTERNAL LO MODE** allows for the use of external LOs to achieve the lowest noise floors at the fastest acquisition speeds.

HA7062B (front end)



### NEW! RESIDUAL PHASE NOISE - AUTOMATED TOOLBOX

The HA7062B takes the guess work out of making additive phase noise measurements. The system is equipped with a unique *Quadrature Monitor* for setting proper system quadrature when using mechanical delay lines. When using Holzworth pre-calibrated electric delay lines, the system takes over completely and sets quadrature on the fly. No more guess work.

### PERFORMANCE SUMMARY

<b>DUT Tuning Range</b>	5MHz – 6.4GHz (5MHz tests utilize model HX4105)
<b>Measurement Floor</b>	
<b>Internal LO Mode</b>	< -175dBc/Hz
<b>Internal LO Bypass Mode</b>	< -185dBc/Hz
<b>External LO Mode</b>	< -185dBc/Hz (standard), <-190 (low noise option)
<b>Signal Acquisition Time</b>	~100ms (DUT frequency dependent)
<b>Measurement Speed</b>	1.2s (1kHz-1MHz), 22s (1Hz-1MHz)
<b>Measurement Offset</b>	0.1Hz to 1MHz

## 2 YEAR WARRANTY