Well-fitted hearing aids provide a terrific service to the hearing impaired, all the way from helping a child learn how to speak to helping an elderly person rejoin society. But the reason that hearing aids aren’t over-the-counter devices available at any drug store is that it’s not enough to provide amplification; it’s also incredibly important that the amplification is appropriate for the person’s hearing loss. And it’s also equally important that the hearing aid is working properly and not producing excess noise or distortion. That’s why your hearing aid clinic needs an FP35 Hearing Aid Analyzer!

The FP35 Analyzer will give you a way to provide superior service to your patients by allowing verification of the hearing aid fitting against a scientifically-proven fitting rule such DSL or NAL-NL1 (with the Real-ear Option) and testing of the hearing aid to make sure that it is functioning properly.

Check Your Hearing Aid Fittings
When the Real-ear Option is ordered, the FP35 Analyzer comes with the Integrated Probe Microphone, a lightweight, adjustable probe microphone for performing real-ear measurements. The size and shape of the ear canal can very greatly from person to person, causing the estimated frequency response from a hearing aid manufacturer’s fitting software to be quite different from the actual response inside the patient’s ear. Use real-ear measurements to measure the actual frequency response of the hearing aid inside the patient’s ear and compare that measurement to a real-ear target such as DSL or NAL-NL1 (linear fitting formulas are also available).

You can perform your real-ear testing in the traditional Insertion Gain measurement screen or in the Real-ear SPL screen, where the patient’s threshold values, measured or predicted uncomfortable values, real-ear target, and real-ear measurements are displayed together on one graph. This allows the clinician to directly compare the patient’s audiometric data to the real-ear measurements and targets and ensure that soft sounds are audible, the hearing aid fitting is appropriate for the loss, and loud sounds are below uncomfortable values. All real-ear measurements are automatically converted between the insertion gain and SPL screens, allowing the clinician to view test data from different perspectives without requiring duplicate measurements.
Coupler Measurements with a Target
In some cases, it may not be practical or possible to perform real-ear measurements on a patient. This is particularly the case when fitting hearing aids on infants or small children. With the FONIX FP35 Analyzer, you can perform a simple RECD measurement that will be used to convert real-ear targets into coupler targets. This allows you to fit the hearing aid using sound chamber measurements, a process sometimes known as “simulated real-ear.” If it is not possible to measure the RECD, an age-corrected average RECD is automatically substituted.

Visible Speech
With the Composite/Digital Speech signal, you also get the ability to test with live or pre-recorded speech. When in Spectrum Analysis mode, the analyzer performs a long-term peak program measurement averaging of the input signal, allowing you to see how the hearing aid is responding to a speech signal. You can either use a live voice signal such as the patient’s spouse or family member, or you can use the line-in connector to play pre-recorded signals on an external CD player. This test is especially useful in the Real-ear SPL test screen where you can compare the results against the patient’s thresholds and UCLs.

Test Functionality
All FP35 Analyzers come with your choice of automated test sequence: ANSI 96/03, IEC, JIS, and ISI (we sell the FP35 Analyzer all around the world, so we have test sequences to support all our international customers). These test sequences allow you to test the hearing aid against manufacturing specifications and make sure it’s functioning properly.

For many clinicians, automated test sequence results are not enough. How does the hearing aid distort in a loud environment? What are the frequency response and compression characteristics when the hearing aid is exposed to broadband signals? How well does the hearing aid’s noise suppression abilities work? All of these questions can be answered by using the built-in Coupler Multicurve screen on FP35 Analyzer.

Computer-based Interface
The FP35 Analyzer is fully compatible with our great software products. NOAH users will be especially interested in the NOAH Real-ear Module, used for verifying hearing aid fittings, and Troubleshooter, a great program for testing hearing aid functionality. Between these two programs, most of the important tests and functionality of the FP35 can be completely controlled from a connected computer. All results are saved into NOAH, eliminating the need for paper records. Users who prefer working with standalone programs may be interested in WinCHAP and Press & Go. See the brochures on those products for more information.

FP35 Options
The FP35 has lots of great options and features. For more details, make sure to check out the FP35 Options brochure.