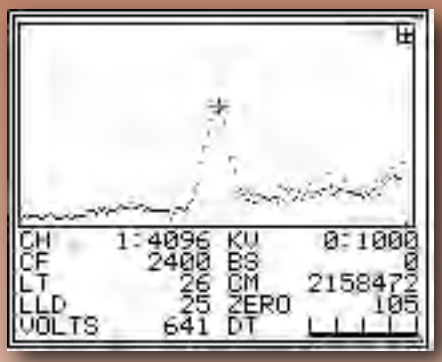
Wiper™ nPhD

A Higher Degree of Performance

The Only Well Counter *Specially* Designed for Nuclear Pharmacies and Cyclotrons.

- ★ Choose results in CPM, DPM, nCi, µCi, mCi, Bq, KBq or MBq
- ★ User-programmable trigger levels
- ★ Reverse decay a test run of samples automatically
- ★ Q.C. hot samples - 300,000+ CPS with excellent linearity
- ★ Exceeds NRC and state requirements
- ★ Calibrate with Cs137, Na22 or Co57
- ★ AutoSpect™ automatic DPM
- ★ Sample volume correction
- ★ *VIEW AND ANALYZE* samples with a 4096 channel MCA
- ★ Extremely flexible sample count times
- ★ Decay calculator; decay a sample to the past or future
- ★ Iterative count function, set it up and walk
- ★ Powerful, yet simple to use

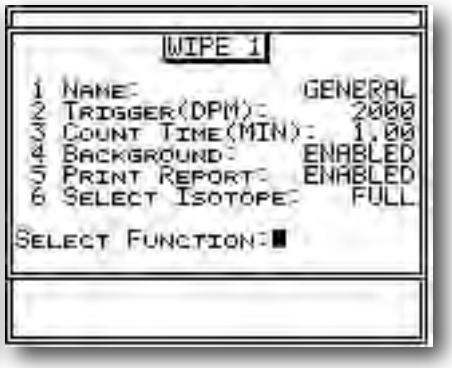


Ideal for P.E.T isotopes (Na22 shown; 511 Kev peak)

LTi LABORATORY TECHNOLOGIES, INC.

Wipe Tests

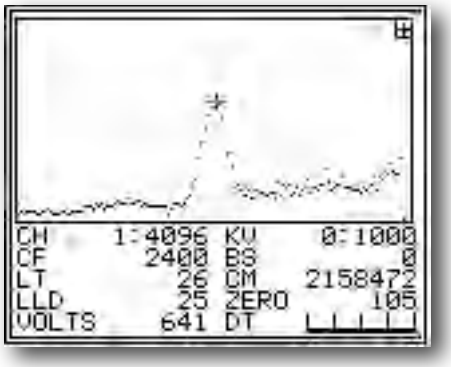
The **Wiper™nPhD** is first and foremost an advanced, easy to use, wipe counter. The Wipe Library features storage for up to 30 unique wipe tests. Whether wiping outgoing packages, or checking a fume hood, there is room to configure a location to your needs. Configuration options include setting a location name, count time, background subtract, and trigger level.



Let's face it, there is no one solution to fit all wipe test needs. That's why the **Wiper™ nPhD** allows you to choose your own Pass/Fail trigger levels and automatically calculates the MDA (minimal detectable activity). Add a printer, for comprehensive reports that will satisfy any inspector.

The Power of 4096.

When you want to *positively* identify an isotope, no wimpy 6, 64, or 256 channel analyzer will do. The ***Wiper™ nPhD*** has the power that professionals need, *4096 channels* for clear isotope identification. Featuring advanced MCA functions usually found only in systems many times more expensive, the **Wiper™ nPhD** is a tool, not a toy.

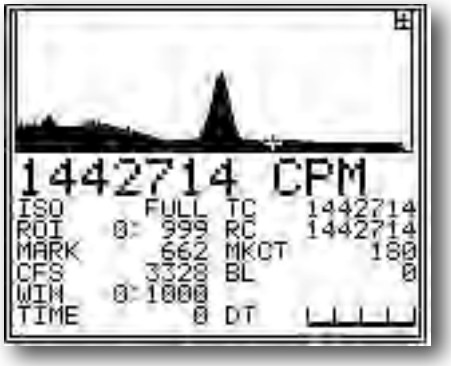


No other counter has Autospect™ automatic efficiency correction. With Autospect™, the ***Wiper™ nPhD*** can calculate absolute activity for most gamma emitting isotopes, without the need for a calibrated source.

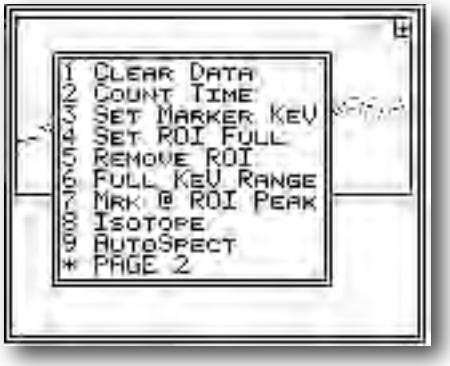
With the ***Wiper™ nPhD***, we've created more than just a counter for wipes -- we've created a tool that will make you wonder what you ever did without it . . .

Multi-Channel Analyzer

The **Wiper™ nPhD** incorporates the power of an expensive Multi-Channel Analyzer. The ***Wiper™ nPhD*** you can identify isotopes, find energy peaks, set a Region-of-Interest (ROI), zoom in/out, adjust the baseline, run Full Width Half Max (FWHM), correct for gamma efficiency with Autospect™, set a marker channel, and so much more.

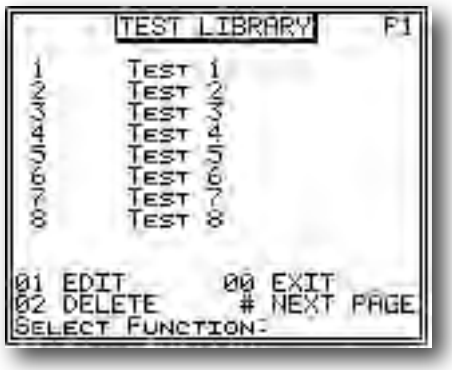


No other wipe test counter has all these features--at any price!

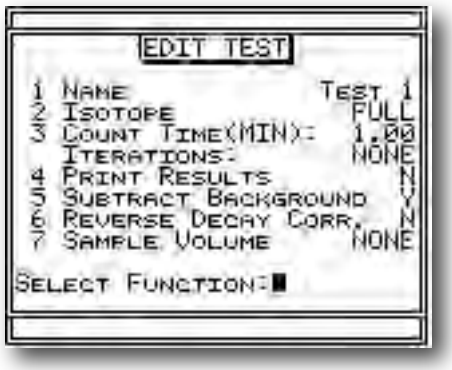


The Test Library

The Test Library can store 16 custom tests. Count samples your way. Run your test with the default name or create a custom name, the choice is yours. The ***Wiper™ nPhD*** allows you to choose your result units.



Whether you prefer CPM, DPM, Curie or Becquerels the choice is yours. Count times can range from 1 second to 16 hours, pick what works for you. Do you have high background in your facility? 19mm lead shielding and channel by channel background subtraction virtually eliminates error.



With configurable iterations, you can count a single sample multiple times without user intervention. Simply set the count time, the number of iterations and walk away. You can choose up to 99 iterations per sample. With count rates over 18,000,000 CPM, you can screen the hottest samples.

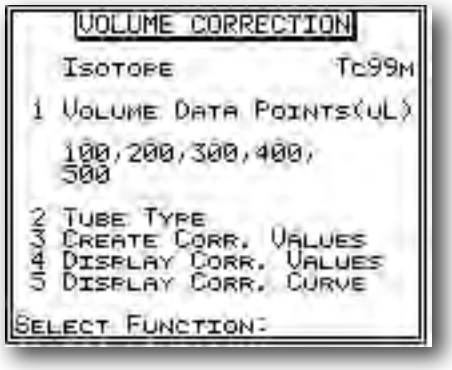
Reverse Decay Correction

Another important feature of the ***Wiper™ nPhD*** is reverse decay correction. When you use reverse decay correction, you can count multiple samples in a batch without fear of error associated with fast decay isotopes. Each sample is automatically decay corrected to the time of the first sample.

Never again do you have the worry of errors introduced by short lived isotopes. Put away your calculator and charts, the work is done automatically.

Volume Correction

Sample volume count errors are a thing of the past. Do you count samples with different volumes? With the ***Wiper™ nPhD*** you can configure a test to use a volume correction curve that will correct the efficiency at different volumes.

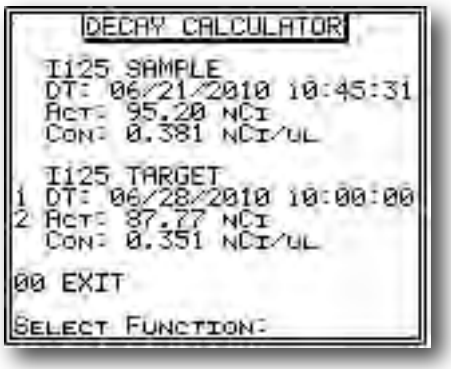


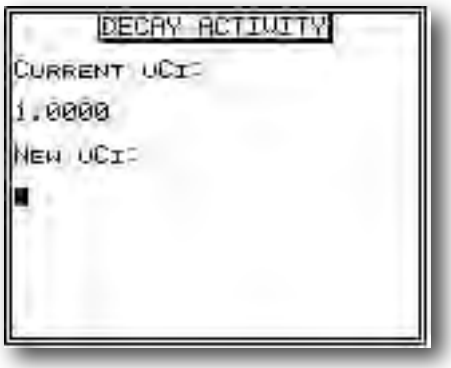
The ***Wiper™ nPhD*** can correct for any isotope. No two isotopes are identical. By allowing you to pipet your own samples, the volume correction curve will be tailored to your detector, your sample tube type, your isotope and your specific volume range.

No more guessing, with the ***Wiper™ nPhD*** you get accurate results, just the way you need them.

Since 1983, LTI has been a leading gamma counter manufacturer. We've earned a worldwide reputation for the quality, accuracy and day to day reliability of our products. Nuclear medicine departments across the country use our Wiper™ and Multi-Wiper™ wipe counters.

The ***Wiper™nPhD*** has been designed specifically for the Nuclear Pharmacy. There is no better combination of features, ease of use, and economical price anywhere.





For more information, or to ORDER your ***Wiper™ nPhD,*** contact LTI or your local LTI distributor today.

Decay Calculator

Do you ever need to know how much activity will be in a sample in 4 hours? How about when a sample will be at a specific activity?

Would you like to measure the concentration of an isotope in solution? Would it be helpful if you knew what that concentration would be next week? With the decay calculator in the ***Wiper™ nPhD,*** you can.

Count a sample or use the keypad to enter the values, provide a target date/time--it's that simple.

If you have a target activity, but need to know the target date, you can enter the activity, i.e. 1mCi, and ***Wiper™ nPhD*** will tell you the date and time your sample will be ready.

Customer Support

LTI's customer service is ready for you 24/7. Call our telephone support staff. Access training videos, FAQ's and helpful hints on a special customer support website. Send us a descriptive email or send us a fax.

Customer support is key at LTI, in fact we still service and support instruments we shipped back in 1985.

SPECIFICATIONS:

Detector

Well-type NaI(tl) crystal coupled to a high gain PMT

Analyzer

4096 channels MCA , 0 - 1MEV range, automatic dead time correction. Count rates over 18M CPM

Well Liner

Removable plastic well liner prevents detector contamination

Display

LED backlit 4.5" LCD (11.25cm)

Shielding

0.75" (19mm) virgin lead shielding. Automatic Background Subtraction.

Output

Dual serial ports - output to an optional serial printer and your Mac/PC/Linux/ LIS

Physical Specifications

Base unit - 10.5" (27 cm) W x 8.5" (22 cm) D x 4.75" (12 cm) H
Detector tower- 6" (15cm) D x 10" (25cm)

Weight

32 lbs (14.5 kg)

Power

100-240VAC 50-60 hz

Customer Support

Via - Web, Email, Telephone, Fax

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AutoSpect™
Efficiency Correction

Until now, there have been two basic ways to determine DPM for wipe test samples:

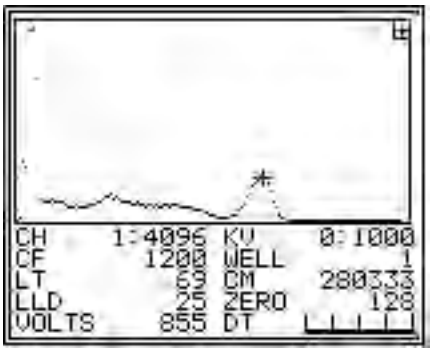
I. Calculate the efficiency of the counter by using a known, calibrated source of the isotope you are looking for (or use a “mock” standard).

II. Enter an efficiency value based on a “best guess”.

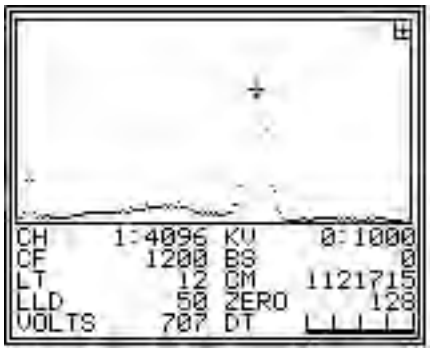
While either of these methods will produce results, keeping calibrated sources for every isotope you use in the department is expensive, and checking them regularly is time consuming. The second method of estimating the efficiency is questionable, and not accepted by all regulatory agencies.

Laboratory Technologies, Inc. now offers you a third option; AutoSpect™. Built into every Wiper™, Multi-Wiper™ and Multi-Wiper HE™, AutoSpect™ provides an accurate method for reporting wipe test results in DPM, without needing calibration sources.

AutoSpect™ uses known detector efficiency values at various levels across the energy spectrum. These values account for crystal thickness and well geometry among other factors in order to maximize accuracy. Armed with this data, the Wiper™ and Multi-Wiper™ automatically determine the detector’s efficiency at any point on the energy spectrum. At the same time, it allows the instrument to count and display spectra as they truly should appear, unaffected by lower detector efficiency at higher energy.



Cs137 spectrum shown “raw”



Cs137 spectrum shown with AutoSpect™ correction

If you choose to use AutoSpect™, the photon abundance can be entered for each isotope in the library. Each isotope is unique, so it is important to enter the proper number. The instrument comes pre-programmed with abundance factors for the most common nuclear medicine isotopes. You can add or adjust any values you wish.

AutoSpect™ applies the crystal efficiency, determined by your isotope window, as well as the photon abundance. Your Wiper™ or Multi-Wiper™ automatically converts CPM into DPM for all wipe test samples run with an AutoSpect™ enabled isotope.

AutoSpect™ makes for truly simple, accurate and automatic wipe test reports sure to please your regulatory inspector or RSO. Best of all, it is already set up in the system; the user needs to do nothing more than count their wipes.