



# Model 970

Universal Multi-Channel Analyzer



## Summary

The Model 970, with a full-featured MCA program, can be used with practically any radiation detector and can extract any data your detector can supply! It has been designed taking into account comments and requests from our current customers. The all-new fully quantitative Windows™ based software package has been designed for ease of use in a 32-bit Windows™ environment. Software also includes 970 for PPC to run the Model 970 using a Windows Mobile™ Device (Jornada, iPAQ, TDS Recon, etc.) running WindowsCE™ or Windows Mobile™. The Software can be installed on as many computers as you like with no restrictions, and it includes free software updates.

## Specifications

4096-channels, can also be configured for 256, 512, 1024, or 2048 channels. Internal bias voltage supply provides positive high voltage from 0 to 2000V at up to 0.5mA (Negative High Voltage available upon request). Adjustable shaping time, 0.25 to 10  $\mu$ s. Wide gain range by utilizing coarse and fine gain controls, achieve gain from x1 to x250.

## Minimum System Requirements

Running Windows XP or higher or Windows Mobile® Device with Serial Connector. Probe Connectors Two detector inputs. One standard series "C" connector for detectors where the signal is joined with the high voltage supply. The other is for detectors having separate connections for high voltage (SHV connector) and signal (BNC connector). Active detector input is selected via software and can be negative, positive, or pre-shaped (positive) signal.

## External Connector

External connector provides +5V, +12V, and -12V for external preamplifiers and two logic signals for notifying external devices of alarm conditions.

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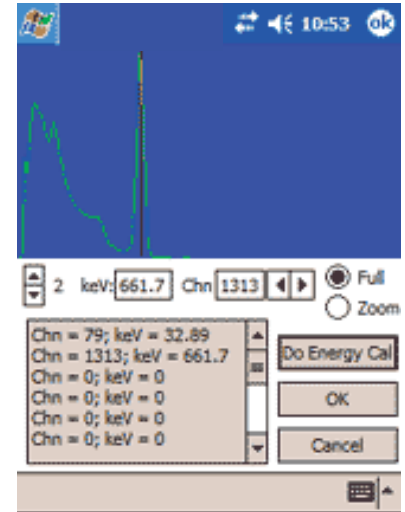


## Switches

Power On/Off, and Fast/Normal charging rates. An internal switch located in the battery compartment suppresses battery-charging circuitry when non-rechargeable batteries are being used.

## LED Indicators

On/Off, External power availability, and fast charge activation



## Power Requirements

External 12VDC power supply, six "AA" NiMH rechargeable batteries (included) when recharging internally, or six standard alkaline "AA" batteries. External 12VDC power jack allows instrument to plug into vehicle. "Fast Charge" of NiMH batteries can also be selected. The Model 970 is fully portable with four hours of battery life and PPC Compatibility

## Temperature Range

32° - 122°F (0° to 50°C)

## Weight

391 grams (13.8 oz.)

## Size

157 x 90 x 44 mm (6.2 x 3.5 x 1.7 in.)

## Includes

MCA Software, Carrying Case, and USB-Serial Adapter.

## Software Includes:

- Fully editable standard libraries include all 387 isotopes listed in "Kocher's Radioactive Decay Tables."
- Multi-channel scaling mode, peak search and identify, quantification based on ROIs library, or peaks search.
- Sophisticated multiple alarm functions are based on the overall count rate, individual ROIs, exceeding a specific rate or an increase in rate over a specific time interval. Alarms can trigger external devices.
- Provisions are included for acquiring and saving spectra repeatedly and continuously while unattended. Spectra can be saved and reloaded to "live" for reanalysis or additional data accumulation, or loaded as a background spectrum. Saved spectra can be superimposed on the "active" spectrum for comparison. Spectrum format is easily accessible by a spreadsheet program. All reports can be previewed, printed, or saved as text or rich text files.

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