

HIGH VOLTAGE WITH MULTICHANNEL ANALYZER MODEL HVMCA2417





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Features:

- Fully portable and light weight
- Utilizing low cost sound cards for signal acquisition in PC
- Compatible with CFP dosimetry software (for dosimetry)
- Compatible with CFP spectrometry software (DMCA software)
- Graphical User interface based on Matlab[®]
- Various applicable free softwares with:
 - × Numerous types of data presentation
 - × Diverse logging methods
- Working with a wide range of radiation detectors from simple GM tube to advanced sodium iodide
- Compatible with different Operating Systems
- Very low HV ripple
- Low voltage drift
- Easily powered using PC USB cable
- Very simple and easily usable



Description:

HVMCA2417 is the most practical and lowest cost radiation detector driver, it can be used with powerful FREE software, now you no longer need expensive NIM equipment, such as, PSU, AMP, ADC or pulse shaping to do gamma spectrometry. The HVMCA2417 measures only $113 \times 51 \times 32$ mm and is fully portable and low weight.

The HVMCA2417 is powered by the USB port on your computer, it has a BNC high voltage output for your radiation detector, and a 3.5 mm audio jack to enter the signal to PC.

For a simple source activity check, the audio signal can be played back through the speakers of your computer, and for more advanced research, the signal can be processed by smart software on your computer to create HVMCA2417 professional quality graphic analysis of nuclear gamma radiation energy. The HVMCA2417 will work with a wide range of radiation detectors, from simple GM tubes to advanced sodium iodide scintillation detectors.

The HVMCA2417 is compatible with CFP dosimetry and spectrometry softwares which bring many different data analysis and presentation tools. A Matlab GUI and various free softwares including "PRA" or "Theremino MCA" is also available to analyze HVMCA2417 data. With a software and a suitable detector, HVMCA2417 becomes a full gamma spectrometry system.

HVMCA2417 outputs an audio signal proportional to the pulse energy, and is designed to work with sound card spectrometry software, utilizing the analog to digital capabilities of modern computers.

For simple counting purposes, it will work with most GM tubes or pancake detectors, and for Gamma spectroscopy it will work best with NaI(TI) scintillation detectors coupled for positive voltage, having resistor chain of 15 M ohm or more.

Device could work using a computer with any type of operating system, a sound card and mic/line in audio jack port.



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Specification:

- Input Power (USB): + 5V
- Current Draw: < 400 mA
- Output Bias Voltage (in 50V steps): 600V 1100V
- Output Signal (Audio Line Level): 0 1000mV
- Pulse length: 100 µsPreamp Gain: 10%
- Ripple: < 1 mV</p>
- Voltage Drift (after 5 minutes): < 1%</p>

Applications:

- Driving various types of detectors
 from simple GM tubes to advanced NaI(TI) Scintillators
- Access to sampled analog signal
- Low cost dosimetry and spectrometry
- Educational spectrometry purposes
- Portable dosimetry and spectrometry
- Educational analysis of unknown sample
- Spectrum analysis of various educational source

Software (Optional)

- Auto Calibration
- Auto Stabilizing with natural source
- Progress bar for elapsed time
- Configuration menu
- Date and time menu
- Cs137 stabilizing

Standard Accessories

- Cables
- User guide DVD
- Delivered in box with foam insert

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Dosimetry Mode



Spectroscopy Mode



