

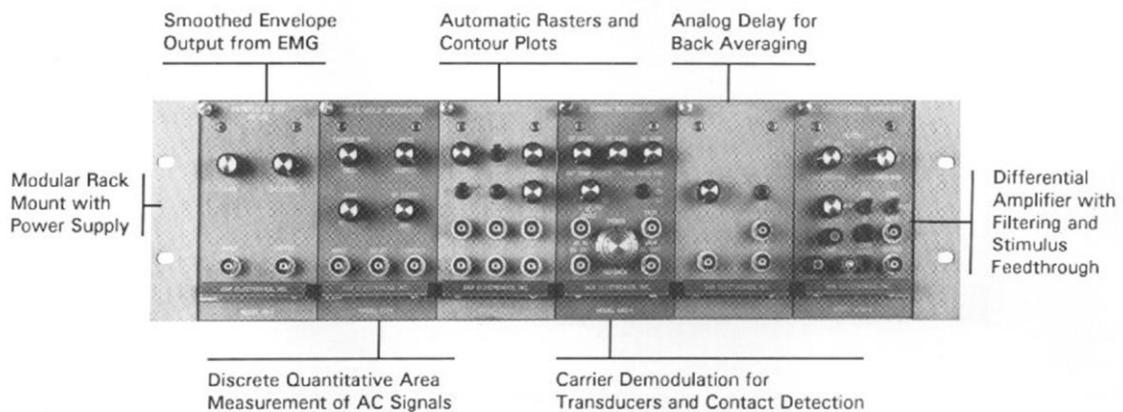


**BAK ELECTRONICS, INC. *Biomedical Instrumentation***

41301 Silver Drive, Umatilla, FL 32784 / Office: 407-324-2907 / e-mail: bakinc@rcn.com

*Filter the Real Message from Your Analog Signals*

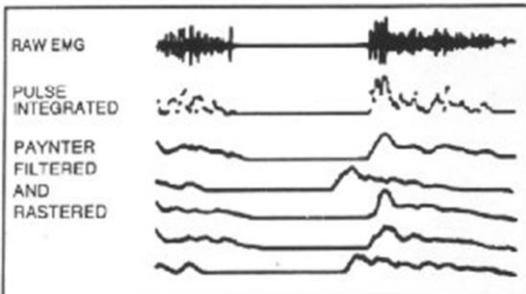
**Letting Your Data Tell Your Story**



You can greatly Enhance the appreciation of time-varying analog signals by properly conditioning and presenting them in special formats. While their initial bandwidth may be high (5-10 kHz for EMG and neurograms) the important information depends on an overview of a relatively long time period.

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Such as several movement cycles. Condensing this information so that the proper quantitative features emerge clearly for the reader can be a difficult problem even with digital computer techniques.



Consider our family of Analog Signal Processors, with most of the commonly used formats (and some innovative ones) built into their hardware. Start with the MDA-7, a high performance differential amplifier with a complete set of high and low pass filters and gains covering just the ranges neurophysiologists' need.

Electronically gated stimulus switching permits you to record and stimulate through the same electrode. If you use spike or event triggered averaging, our AD-6 Analog Delay lets even an inexpensive average look backwards in time before the trigger signal.

We offer three different signal integration systems to extract amplitude modulation. The AC Bridge Integrator performs a half-wave rectification and RC integration. It can be used with high frequency carriers as in the determination of paw contact time in freely moving animals. Its special feature is that it can be used with modulated resistive signals as well as modulated voltages, ideal for force and length transducers.

The Paynter Filter has become a popular device for showing EMG modulation envelopes because its full-wave, 3-pole design follows the signal dynamics even with a high degree of smoothing. If you are looking at rapidly modulated events such as reflexes, or for truly quantitative measurements of rectified signal area, you will want to use our Pulsed Sample and Hold Integrator. a powerful new technique by itself and an excellent preprocessor of signals to be digitized.

All of the above signals can be displayed in publication-ready form on a single oscilloscope channel with our Raster Stepper. This extremely versatile module allows you to wrap around long traces, stepping up or down each sweep. A variety of controls and counting modes permit manual and electronic interfacing with other equipment such as stimulators and timing generators, and chaining of these modules for very complex displays.

If you need something we haven't mentioned here, please let us know. These are only a few of our modules, and we will be happy to customize or develop special equipment for your needs.

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