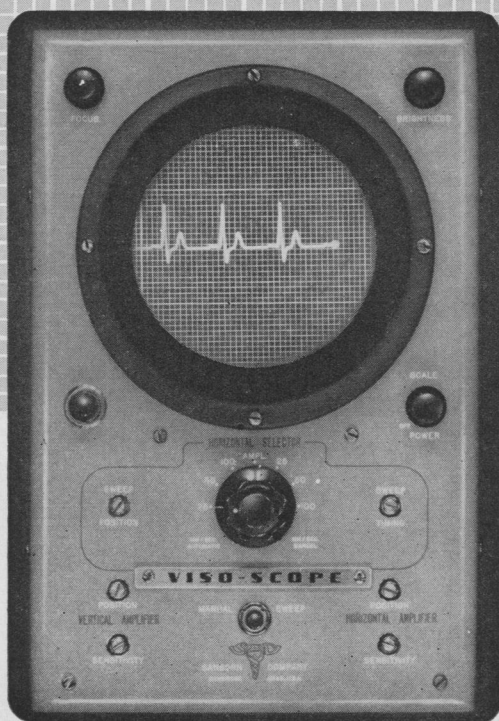


SCIENCE

20 July 1956

Volume 124, Number 3212

Editorial	Radiation and Public Knowledge	101
Articles	Detection of the Free Neutrino: a Confirmation: <i>C. L. Cowan, Jr., et al</i>	103
	Meteorological Aspects of Atomic Radiation: <i>Committee on Meteorological Aspects of the Effects of Atomic Radiation</i>	105
News of Science	British Report on Radiation Hazards; Anticlotting Drug; Reactors for Denmark and the Netherlands; Priorities for Polio Vaccine; Expanding Universe; New Atom Smasher; News Briefs; Scientists in the News; Recent Deaths; Education; Grants, Fellowships, and Awards; In the Laboratories; Miscellaneous	112
Reports	Accumulation of Reduced Pyridine Nucleotides by Illuminated Grana: <i>A. San Pietro and H. M. Lang</i>	118
	<i>Adenoviruses</i> : Group Name Proposed for New Respiratory-Tract Viruses: <i>J. F. Enders et al.</i>	119
	Encoding Nonintegers in a General p -adic Number System: <i>D. K. Cheng</i> ..	120
	Some Serotoninlike Activities of Lysergic Acid Diethylamide: <i>E. Shaw and D. W. Woolley</i>	121
	Gamma-Ray Activity of Contemporary Man: <i>C. E. Miller and L. D. Marinelli</i>	122
	Mitochondrial Self-Duplication Observed <i>in vitro</i> : <i>H. A. Leon and S. F. Cook</i>	123
	Dual Requirement of Walker Carcinoma 256 <i>in vitro</i> for Asparagine and Glutamine: <i>R. E. Neuman and T. A. McCoy</i>	124
	Induced Biosynthesis of Uricase in Yeast: <i>A. H. Roush and A. J. Domnas</i>	125
	On Space Group and Molecular Orientation of Azulene: <i>Y. Takeuchi and R. Pepinsky</i>	126
	International Relations in Science and Problems of Visas: <i>J. J. Nassau</i>	127
	Neoplastic Changes Developing in Epithelial Cell Lines Derived from Normal Persons: <i>A. E. Moore, C. M. Southam, S. S. Sternberg</i>	127
	X-ray Microscopy of Veins of the Skull: <i>C. G. Hewes et al.</i>	129
Meetings and Societies	Physical Anthropologists; Hotel Headquarters and Housing, New York Meeting; Meeting Notes; Society Elections; Forthcoming Events	130
	Equipment News	137



MODEL 169A VISO-SCOPE

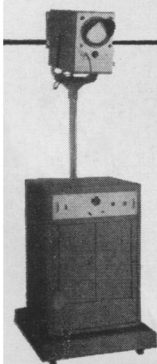
DESIGNED for compatibility with other SANBORN equipment (examples, right) and simplified operation via minimum controls (illustration, above), the Model 169A Viso-Scope now permits the owner or purchaser of SANBORN recording instruments to greatly widen their field of usefulness.

The cathode ray tube selected for this 'scope has a *dual coating* which produces a beam image of exceptional sharpness and long persistence on the orange screen-filter (when monitoring) and of extreme brightness and short duration on the blue screen-filter (for photography). When photography is desired, a Fairchild or DuMont oscilloscope camera may be mounted on the screen bezel (or any common camera may be used).

Sweep speeds of 25, 50 and 100 millimeters per second are obtainable instantaneously, and enlargement on the Viso-Scope screen of a segment of the tracing which is of particular interest may be made at any time.

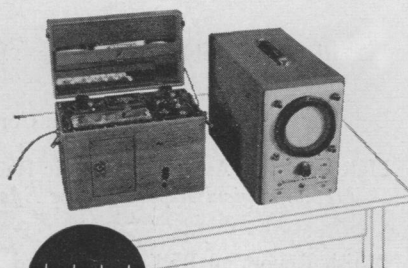
Typical applications of the Viso-Scope include: observation of changes in the electrocardiogram resulting from use of drugs; pressure monitoring in catheterization during manipulation of the catheter; and a more precise study of complex wave forms by an instantaneous increasing of the sweep speed, such as in myography, phonocardiography, and small animal electrocardiography.

Descriptive literature on the Viso-Scope complete with diagrams showing hook-up requirements of various Sanborn recorders is available on request.



The Model 169A-OR (Operating Room) Viso-Scope is a completely self-contained oscilloscope-amplifier unit, specially designed for visual ECG presentation during surgery in the presence of explosive gases. Viewing unit is supported at or above five foot height on a steel column, and may be turned and tilted for best viewing angle. Provision is made for connection to a remote ECG, when written records are also desired.

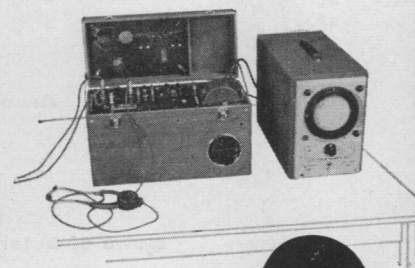
FOR CONTINUOUS VISUAL MONITORING OF PHYSIOLOGICAL EVENTS



FOR
SINGLE-CHANNEL
MONITORING

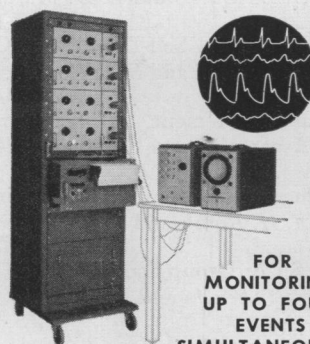
Electrocardiograms may be continuously monitored with a Viso-Scope connected directly to a Sanborn Viso-Cardiette (Model 572 or 51). Or, a Model 128 or 141 Sanborn Recorder may be similarly used for viewing other phenomena such as pressure, temperature, sphygmograms, pneumograms, myograms, etc., with suitable transducers employed.

Written records may be made whenever desired during the monitoring. Selection of sweep speeds on the Viso-Scope is particularly advantageous to owners of these instruments.



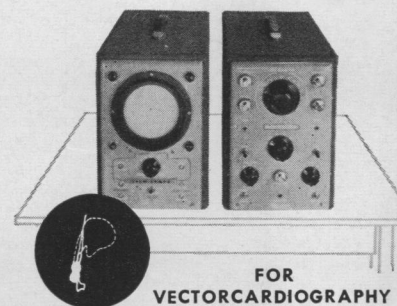
FOR
HIGHER SPEED
MONITORING

With the addition of an attachable booster amplifier the Viso-Scope may be used with a Sanborn Twin-Beam Cardiette, to display phenomena of higher frequency such as are encountered in phonocardiography, small animal electrocardiography, high fidelity human electrocardiography, etc. Separate oscilloscope jacks on the Twin-Beam permit ready selection of the signal from either "phono" or ECG channel, for alternate display on the Viso-Scope screen.



FOR
MONITORING
UP TO FOUR
EVENTS
SIMULTANEOUSLY

The Sanborn Electronic Switch, shown above connected to each channel of a Model 154M four-channel Poly-Viso, is designed for use with any Sanborn two- or four-channel *direct writing* recording system. It permits *simultaneous* observation of as many phenomena as the system is set up to record, and a Viso-Scope thus connected appears to be operating with *separate beams*. Controls permit liberal relative positioning of beams on the scope screen, and *individual* sensitivity control. These adjustments have no effect on the recording instrument.

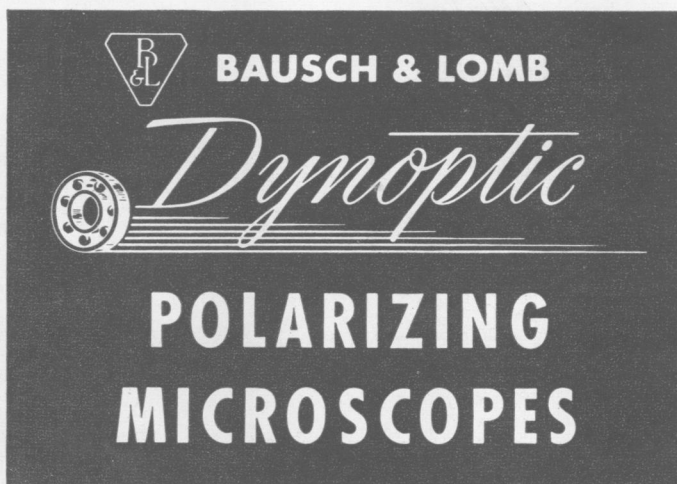
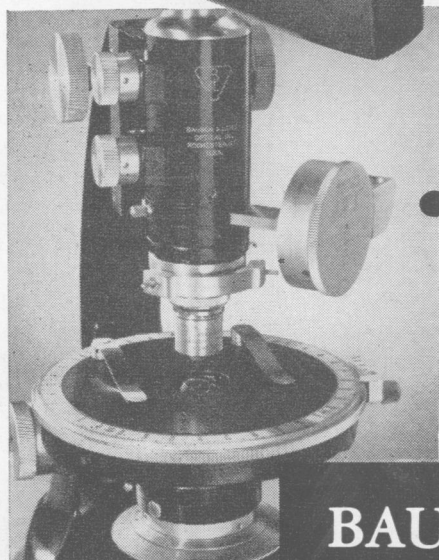
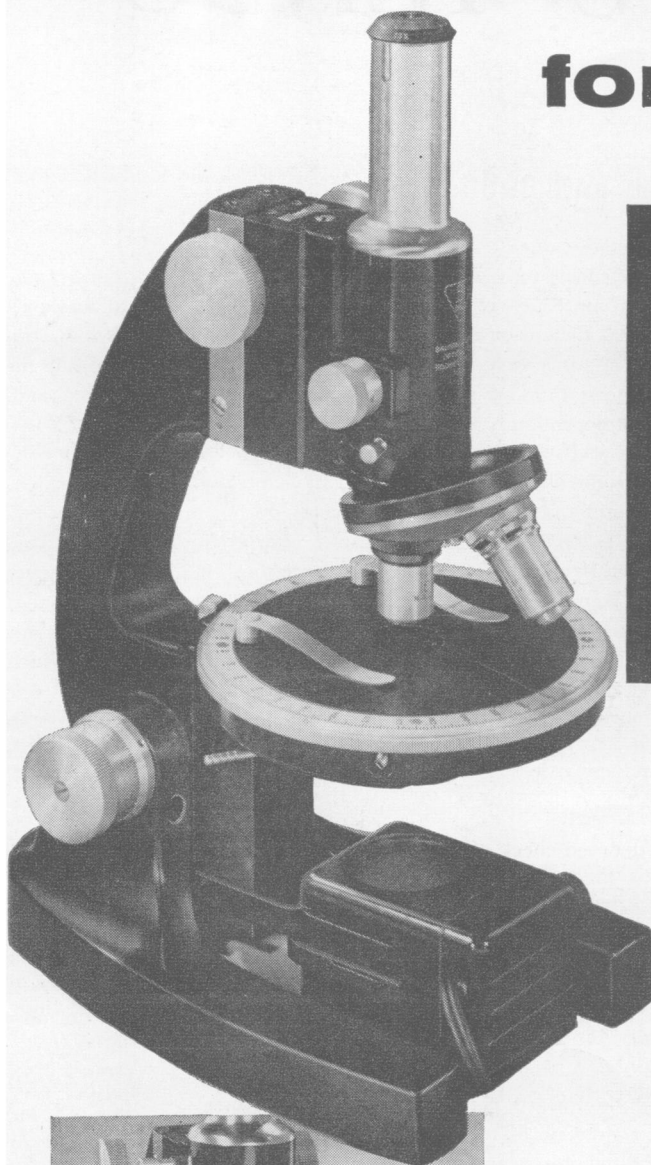


FOR
VECTORCARDIOGRAPHY

The Sanborn Model 185 Vector System (or vector amplifier) shown above right, has been specifically designed for use with the Viso-Scope, for displaying either vector loops or ECG complexes. This instrument's lead selector switch, together with a specially-marked 9-wire patient cable and extra electrodes, permit the instantaneous selection of either cube or tetrahedral vector leads, or ECG leads, for Viso-Scope display. Adequate sensitivity (10" per mv) provides clear showing of P and T loops, as well as QRS. Additionally (via installation of timing transformer in the Viso-Scope) the Vector system provides Z axis, or intensity modulation for indication of speed and direction of sweep trace.


SANBORN COMPANY
 CAMBRIDGE 39, MASSACHUSETTS

MORE MICROSCOPE for your money



EASIEST FOCUSING EVER!

Entire focusing system "floats" on ball bearings and rollers; no drift, bind, or backlash. Ultra-fine focus, with 1 micron divisions, assures immediate critical focus at all magnifications.

LIFETIME ACCURACY!

Ball bearing nosepiece, self-compensating for wear, provides identical repeat settings. Ball bearing stage, factory-precentered, graduated in single degrees, drilled and tapped to receive mechanical stage. Choice of pre-set or rotatable polaroid polarizer, both with iris diaphragm. (Centerable nosepiece available for research.)

BRIGHT, EASY-TO-SEE IMAGES!

Entire optical system is dustproof, including flip-in polaroid analyzer and accessory slot. Strain-free achromatic objectives. Uniform light on full field. Opti-lume Illuminator (optional), interchangeable with mirror, is ventilated to assure cool stage necessary for Becke Line Tests.

● NEW! B&L ACCESSORY SLOT COMPENSATOR SPEEDS BIREFRINGENCE MEASUREMENTS

This important quality control and research aid quickly and efficiently measures phase difference; speeds determination of optical character or sign. Direct-reading magnified scale, calibrated in millimicrons; no computation or conversion needed. Readings correct to $\pm 2\%$ over a range of 0 to 2700 millimicrons. Fits all American microscopes of current design.

BAUSCH & LOMB



WRITE FOR DATA AND DEMONSTRATION

Catalog D-130, and obligation-free demonstration, yours on request. Bausch & Lomb Optical Co., 64207 St. Paul St., Rochester 2, New York.

America's only complete optical source... from glass to finished product.