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TYPICAL APPLICATIONS:

- Laboratory electromagnet systems for NMR and EPR experiments.
- Simultaneous control of tandem mass spectrometer magnets.
- Programmable control of mass spectrometer magnet systems.
- On-line computer control for product beam transport systems.

FEATURES:

- Digital readout of field in gauss or percent of sweep range and power supply current.
- All electronic integrator sweep to provide stepless noise-free ramps.
- External and internal programmable sweep.
- Digital signals for interfacing to computer analyzers.
- Analog signals for interfacing to recorders.
- Easily adaptable to most laboratory power supplies.
- Freedom from magnet hysteresis effects and external magnetic influences.
- Remote or cabinet mounted for operational convenience.
- Compact: 5 1/4" H x 19" W x 12" D.

SPECIFICATIONS:

RANGE: 0-50 KG
ACCURACY: .01% of set field
REGULATION: 1×10^{-4} or 5 mG.
for $\pm 10\%$ line or load
variation
STABILITY: 1×10^{-4} or 5 mG.
of operating field
SWEEP MODES: $\pm$ Single ramp,
repetitive triangle, repetitive
saw tooth, plus hold and
auto-centering
SWEEP RATES: 8 steps; .5 to
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particularly suitable for the certification requirements of nuclear-medicine technologists and physicians. Furthermore, the discussion of some of the newer ideas in nuclear medicine should help to delay the obsolescence that is the destiny of most texts in this rapidly evolving field.

DOUGLAS R. SHEARER
Department of Nuclear Medicine
Rhode Island Hospital
Providence

new books

Optics and Acoustics

Nonlinear Optics (Frontiers In Physics, Vol. 21). N. Bloembergen. 229 pp. W. A. Benjamin (Advanced Book Program), Reading, Mass., 1965 (3rd printing, 1977). \$13.50

Infrasound and Low Frequency Vibration. W. Tempest, ed. 364 pp. Academic, London, 1977. £13.50

Musical Acoustics: Piano and Wind Instruments (Benchmark Papers in Acoustics, Vol. 9). E. L. Kent, ed. 367 pp. Dowden, Hutchinson and Ross, Stroudsburg, Penna. (Distributor: Halsted, New York), 1977.

Electricity, Magnetism and Fields

Basic Electricity, 2nd edition. W. M. Gibson. 189 pp. Longman, New York, 1976. \$7.00

Quantum Electronics and Lasers

Nonlinear Laser Spectroscopy (Springer Series in Optical Sciences, Vol. 4). V. S. Letokhov, V. P. Chebotayev. 466 pp. Springer-Verlag, New York, 1977. \$27.90

Nonlinear Infrared Generation (Topics in Applied Physics, Vol. 16). Y.-R. Shen, ed. 279 pp. Springer-Verlag, New York, 1977. \$36.10

Fluids and Plasmas

Plasma Physics: Nonlinear Theory and Experiments (36th Nobel Symp., Lerum, Sweden, June 1976). H. Wilhelmsson, ed. 513 pp. Plenum, New York, 1977. \$39.80

Crystallography, Low-Temperature and Solid-State Physics

Quantum Field Theory of Solids: An Introduction. H. P. J. Haken. 330 pp. North-Holland, Amsterdam, 1977. \$50.95

Mössbauer Effect Methodology, Vol. 10 (Proc. of the Tenth Symp., sponsored by the New England Nuclear Corp., New York, February 1976). I. J. Gruverman, C. W. Seidel, eds. 354 pp. Plenum, New York, 1976. \$32.50

Superconductivity in d- and f-Band Metals (Proc. of the Second Rochester Conf., Roch-

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Astronomy, Cosmology and Space Physics

Evolution of the Solar System. H. Alfvén, G. Arrhenius. 599 pp. NASA, Washington, D.C., 1976. (Available as NASA SP-345 from Supt. of Documents, US Govt. Printing Office, Washington, D.C. 20402 for \$11.00, cloth-bound)

Relativity and Cosmology, 2nd edition. W. J. Kaufman III. 154 pp. Harper and Row, New York, 1977. \$5.95

Exploring the Galaxies. S. Mitton. 206 pp. Scribner's, New York, 1977. \$12.00

Lecture Notes on Introductory Theoretical Astrophysics. R. J. Weymann, T. L. Swihart, R. E. Williams, W. J. Cocke, A. G. Pacholczyk, J. E. Felten. 230 pp. Pachart, Tucson, 1976. \$14.95

Geophysics and Planetary Science

Encyclopedia of Physics, Vol. 49, Part 5 (Geophysics III, Part 5). K. Rawer, ed. 407 pp. Springer-Verlag, Berlin, 1976. \$81.20

Physics of the Earth, 2nd edition. F. D. Stacey. 414 pp. Wiley, New York, 1977. \$19.95

Atmospheric Effects on Radar Target Identification and Imaging (Proc. of a NATO Advanced Study Institute held at Goslar, Harz, Federal Republic of Germany, September-October 1975). H. E. G. Jeske, ed. 463 pp. D. Reidel, Boston, 1976. \$39.50

Biological and Medical Physics

Introductory Biophysics. F. R. Hallett, P. A. Speight, R. H. Stinson, in association with W. G. Graham. 243 pp. Halsted, New York, 1977. \$12.95

Intermolecular Interactions and Biomolecular Organization. A. J. Hopfinger. 395 pp. Wiley-Interscience, New York, 1977. \$26.00

Theory and Mathematical Physics

Dispersion Forces. J. Mahanty, B. W. Ninham. 236 pp. Academic, London, 1976. £9.20

Mathematical Modeling. J. G. Andrews, R. R. McLone. 260 pp. Butterworths, Boston, 1977. (Price not stated)

Multiple Hypergeometric Functions and Applications. H. Exton. 312 pp. Halsted, New York, 1977. \$27.50

Introduction to Ergodic Theory. Ya. G. Sinai. 144 pp. Princeton U.P., Princeton, 1977. \$6.00

Associative Memory: A System-Theoretical Approach (Communication and Cybernetics, Vol. 17). T. Kohonen. 176 pp. Springer-Verlag, New York, 1977. \$21.20

Ordinary and Delay Differential Equations (Applied Mathematical Sciences, Vol. 20). R. D. Driver. 501 pp. Springer-Verlag, New York, 1977. \$14.80

Supersonic Flow and Shock Waves (Applied Mathematical Sciences, Vol. 21). R. Courant,

K. O. Friedrichs. 464 pp. Springer-Verlag, New York, 1976 (reprinted from 1948). \$19.80

Introduction to the Renormalization Group and to Critical Phenomena. P. Pfeuty, G. Toulouse. 190 pp. Wiley-Interscience, New York, 1977. \$19.95

The Theory of Partitions (Encyclopedia of Mathematics and Its Applications, Vol. 2). G. E. Andrews. 255 pp. Addison-Wesley (Advanced Book Program), Reading, Mass., 1976. \$16.50

Functions of Several Variables, 2nd edition. W. Fleming. 411 pp. Springer-Verlag, New York, 1977. \$16.80

The Wave and Ballistic Theories of Light:

A Critical Review. R. A. Waldron. 201 pp. Frederick Muller, London, 1977. £14.50

Optical and Electrical Properties (Physics and Chemistry of Materials with Layered Structures, Vol. 4). P. A. Lee, ed. 464 pp. D. Reidel, Boston, 1976. \$49.00

Modular Representations of Finite Groups. B. M. Puttaswamaiah, J. D. Dixon. 242 pp. Academic, New York, 1977. \$23.50

Quantum Dynamics: Models and Mathematics (Proc. of a Symp. held at the Center for Interdisciplinary Research, Bielefeld University, West Germany, September 1975). L. Streit, ed. 239 pp. Springer-Verlag, Vienna, 1976. DM 58.00

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Computing Methods in Applied Sciences (Lecture Notes in Physics, Vol. 58—Lectures presented at the Second Int. Symp., Heidelberg, December 1975). R. Glowinski, J. L. Lions, eds. 593 pp. Springer-Verlag, New York, 1976. \$15.20

Stability of Dynamical Systems: Theory and Application (Lecture Notes in Pure and Applied Mathematics, Vol. 28—Proc. of the NSF-Conference Board of Mathematical Sciences Regional Conf., Mississippi State University, August 1975). J. R. Graef, ed. 214 pp. Marcel Dekker, New York, 1977. \$19.75

Differential Geometry and Relativity: A Volume in Honour of André Lichnerowicz on His 60th Birthday (Mathematical Physics and Applied Mathematics, Vol. 3). M. Cohen, M. Flato, eds. 304 pp. D. Reidel, Boston, 1976. \$29.50

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Fourier Transform NMR Techniques: A Practical Approach. K. Müllen, P. S. Pregosin. 149 pp. Academic, London, 1977. \$14.75

Semi-Conductor Electronics Design. F. K. Manasse. 562 pp. Prentice-Hall, Englewood Cliffs, N.J., 1977 (revised version of 1967 text). \$18.95

Electron Spectroscopy for Surface Analysis (Topics in Current Physics, Vol. 4). H. Ibach, ed. 255 pp. Springer-Verlag, New York, 1977. \$28.20

Analytical Calorimetry, Vol. 4. R. S. Porter, J. F. Johnson, eds. 251 pp. Plenum, New York, 1977. \$27.50

Advances in Electronics and Electron Physics, Vol. 43. L. Marton, ed. 259 pp. Academic, New York, 1977. \$27.00

Heat Transfer from Flames. W. A. Gray, J. K. Kilham, R. Müller. 152 pp. Elek Science, Salem, N.H., 1976. \$9.95

The Mini-Computer in the Laboratory: With Examples Using the PDP-11. J. W. Cooper. 365 pp. Wiley-Interscience, New York, 1977. \$19.50

Semiconducting Devices: A Bibliography of Fabrication Technology, Properties, and Applications. A. H. Agajanian. 944 pp. IPI/Plenum, New York, 1976. \$57.50

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Heat, Thermodynamics and Statistical Physics

Rheinisch-Westfälische Akademie der Wissenschaften, Vol. 260 (L'Ordre par Fluctuations et le Système Social, by I. Prigogine; Entropie einst und jetzt, by J. Meixner). 74 pp. Westdeutscher Verlag, Wiesbaden, West Germany, 1976. DM 22.00

Gleichgewicht der Absorption von Gasen in Flüssigkeiten, Part 1: Absorption in Flüssigkeiten von niedrigem Dampfdruck (Landolt-Börnstein Zahlenwerte und Funktionen aus Physik, Chemie, Astronomie, Geophysik und Technik, 6th edition: Vol. 4, Technik: Part 4, Wärmeteknik). H. Hausen, ed., assisted by A. Kruis. 479 pp. Springer-Verlag, Berlin, 1976. \$159.90

Energy and Environment

Critical Material Problems in Energy Production (based on lectures sponsored by the Joint Center for Materials Science in New Mexico). C. Stein, ed. 915 pp. Academic, New York, 1976. \$29.50

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Student Texts and Popularizations

Basic Electronics for Scientists, 3rd edition. J. J. Brophy. 430 pp. McGraw-Hill, New York, 1977. \$18.50

Physics of Technology Series (Instructor's Manual and 27 Modules, produced by the Tech Physics Project with coordination by the American Institute of Physics). W. G. Aldridge, P. Dilavore, B. B. Marsh, J. W. McWane, C. R. Stannard, H. Wilkins. 378 pp. (manual only). McGraw-Hill, New York, 1975-76. \$69.80 set price (manual only, \$2.95)

The Ion Effect: How Air Electricity Rules Your Life and Health. F. Soyka (with A. Edmonds). 181 pp. Dutton, New York, 1977. \$7.95

Experiments in Nuclear Science, 2nd edition (Ortec Application Notes, Vol. 34). Ortec, Oak Ridge, Tenn., 1976. \$10.00

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Key Problems of Physics and Astrophysics. V. L. Ginzburg. 148 pp. Mir, Moscow (US distributor: Imported Publications, 320 W. Ohio St., Chicago, Ill. 60610), 1976. \$2.25 □

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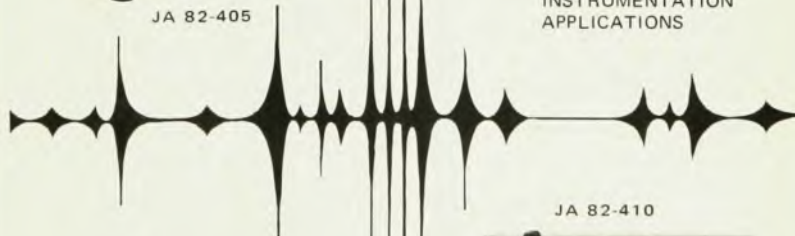
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