Other accessories planned are a dual head for simultaneous parallel recording of two separate signals for comparison of data, a time-pulse amplifier and head, and a pickup head for playback of recorded data. Voltage input is 0.01 to 20 v and input impedances 600, 100 000, and 500 000 ohms. Tape drive is constant to ±0.1%.—MICROSOUND, Inc., 4627 Leaky Street, Culver City, California.

New General Purpose Amplifier

3 INSTRUMENTS IN 1

The new Honeywell Differential Input Indicating Amplifier, Model 2HLA-9, is a general purpose, low level d-c instrument. It may be used as an ultra-sensitive null indicator, an indicating amplifier or a preamplifier for self-balancing recording potentiometers. Reliability, simplicity, ruggedness, plus sensitivity permit use of the Model 2HLA-9 in virtually every location where a source of 115 volts, 50 or 60 cps is available. The unit may be conveniently mounted on rack or bench.

The Model 2HLA-9 is a magnetic-electronic instrument that possesses the most desirable characteristics of both mechanical and electronic galvanometers, including high resistance to strays, overload protection and rapid response. Write for Technical Bulletin B-C2HLA-9 to Minneapolis-Honeywell, Boston Division, Dept. 28, 40 Life Street, Boston, Mass.

Analog Computing Component

The Model K5-M multiplier-divider is an analog computing component based on a semiconductor network. It accepts three variable inputs $e_1$, $e_2$, $e_3$, and provides as output $e_1(e_2/e_3)$. Accuracy as a multiplier, including drift, is said to be better than ±0.1 v in all four quadrants.

A three-digit decade provides an adjustable voltage which may be added to numerator, denominator, or output, and which serves as an adjustable scale factor for operations involving only two variables. The dynamic response of the unit is determined by a switch setting, adjustable, for example, to give less than 1° phase shift at 1 kc or 3-dB attenuation at 14 kc. The standard range of inputs and outputs is ±50 v. No external equipment is necessary to obtain products, ratios, squares, square roots, or absolute values.—GEORGE A. PHILBRICK RESEARCHES, INC., 285 Columbus Avenue, Boston 16, Massachusetts.

256 Channel Analyzer Systems

This instrument is a versatile pulse analyzer featuring plug-in logic. The main unit contains the magnetic-core memory, memory-current drive circuits, memory cycle control binaries, address and arithmetic binaries, binary-to-analog converters, cathode-ray-tube display and power supplies. Plug-in units are available for pulse-height analysis, neutron-time-of-flight measurement, pulsed-neutron decay measurement, or special program. Several data-readout systems are pro-

FEATURES

INPUTS: ±10, 30, 100, 300, 1000, 3000, 10,000, 30,000 μ volts.

ISOLATED DIFFERENTIAL INPUT: For operation at high a-c and d-c voltage above ground without error.

MAGNETIC CONVERTER INPUT: For accurate d-c to a-c conversion with minimum zero drift and high immunity to a-c ripple.

ADJUSTABLE ZERO SUPPRESSION: ±100% on 10 through 3000 μv ranges.

DRIFT: ±0.50 μv volt short term.

COMMON-MODE REJECTION: 10x10/1 or better at d-c, better than 250,000 to 1 at 60 cps.

OUTPUT: ±10 volts, ±50 mv and ±10 mv taps.

OUTPUT IMPEDANCE: 1000 ohms.

INPUT IMPEDANCE: Approx. 1000 ohms.

NOISE: Less than 0.1% rms 0-10 KC.

FREQUENCY RESPONSE: 3 db down at 5 cps maximum.

Honeywell First in Control