Universal Audio

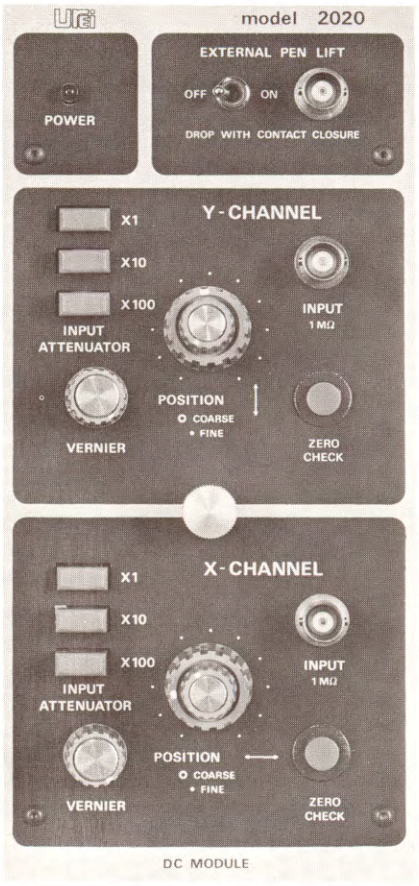
DC INPUT MODULE
FOR 200 SERIES MAINFRAMES

MODEL
2020

Model 2020 is a general purpose DC plug-in to be used with UREI 200 system mainframes. When installed in the 200 X-Y mainframe it extends the capabilities of the recorder to produce hard-copy plots of the relationship between two DC variables, and accepts signals from such devices as analyzers, sweep and function generators, multipurpose test sets, log converters, calculators and computer read-outs. Therefore, applications are suggested in research and development, quality control, manufacturing, maintenance, and in the field. When used with the model 201 Display Interface Mainframe, the 2020 provides X, Y and Z information for continuous viewing on oscilloscopes.

The inputs and outputs are protected through isolation amplifiers which do not limit the excellent slew rate capability and accuracy of the mainframe. Calibrated attenuators with overlapping verniers match the inputs to a wide range of voltages and adapt to either inch or metric scaling. Both axes have independent and fully variable zero offset to position the pen over any point on the graph. Zero setting can always be instantly verified without removing the external voltage.

Althought the pen lift may be controlled locally, an additional input is provided for an external pen lift signal. Closure of a pair of contacts lowers the pen. With the 201 Display Interface Mainframe this signal is utilized to generate retrace blanking information for the Z-axis.



DC MODULE

FEATURES:

- Plug-in versatility
- Simple operation
- Easy calibration to inch or metric scales
- Constant input impedance under all conditions
- Zero positioning of both coordinates to any graphic point
- Zero check pushbutton
- Accepts remote pen lift signal
- High accuracy and reliability
- Sturdy construction
- Low cost

UNITED RECORDING ELECTRONICS INDUSTRIES
8460 SAN FERNANDO RD., SUN VALLEY, CALIFORNIA 91352 (213) 767-1000
TELEX 65-1389 UREI SNVY
a UREI company

TECHNICAL SPECIFICATIONS

(Specifications are identical for both X and Y Channels.)

ELECTRICAL

Sensitivity : 0.1, 1.0, 10 volt per inch.

Input Attenuator : 3 ranges, x 1, x 10, x 100.

Attenuator Vernier : Continuously variable over a a 10:1 range.

Max. Input Voltage : ±100 V.

Input Impedance : 1 Mohm, constant under all conditions.

Protection : Continuous short circuit will not cause damage.

Zero Position : Control range covers any point on the paper.

Pen may be positioned within 0.005 inch at any point.

Position remains constant regardless of test signal amplitude or range setting.

Zero Check : Momentary grounding of input amplifier.

Zero Drift : Not more than 0.1 inch per day, independent of temperature.

Pen Lift : Contact closure lowers pen.

External Pen Lift : Toggle switch. In the EXT. position an external pen lift signal may be applied to the circuit. In the OFF position the pen will remain in the writing mode.

Signal Inputs : BNC connectors.

Mainframe Interconnection : Edge connectors.

PHYSICAL

Size : 96.5 x 208.3 mm, depth behind front panel 81.3 mm. (3.8" x 8.2" x 3.2") Designed to fit all series 200 mainframes.

Weight : 0.680 kg (1.5 pounds)

Shipping Weight : 1.50 kg (3.3 pounds)

Finish : Front panel — aluminum, with dark and light gray baked enamel, to match mainframes.

CONTROLS

3 Pushbuttons : Interlocked, to select desired input range.

Vernier : Adjusts input sensitivity between attenuator ranges.

Position : Outer knob adjusts coarse pen position.

Inner concentric knob for fine pen position control.

Zero Check : Momentary pushbutton disconnects input signal and applies zero volt to the input amplifier.