

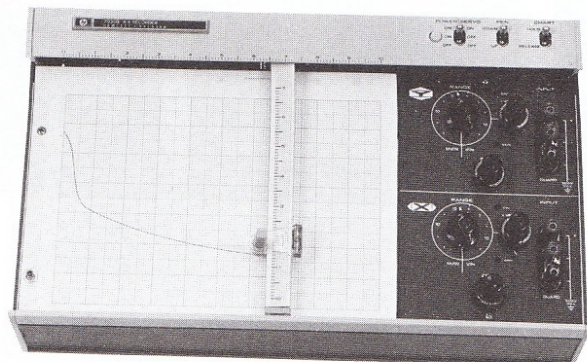


RECORDERS & PRINTERS

General performance X-Y recorder, time base

Models 7035B & 17108A

- Floating Guarded inputs



7035B

The 7035B is a high-quality, low cost instrument designed for use in general purpose applications. Each axis has an independent servo system with no interaction between channels. The 7035B plots two graphs from two dc signals representing the function being measured.

Input terminals accept either open wires or plug-type connectors. Five calibrated ranges from 0.4 mV/cm (1 mV/in.) to 4 V/cm (10 V/in.) are provided in each axis. A variable range control permits scaling of signal for full scale deflection. High input impedance (1 megohm on all but the first two ranges), floated and guarded input, and 0.2% accuracy is provided.

Each closed-loop servo system uses a high-gain, solid-state servo amplifier, servo motor, long-life balance potentiometers, photo-chopper, low pass filter, guarded inputs, and attenuator and balance circuit.

A plug-in time base, Model 17108A, operates on either axis to provide five sweep speeds from 0.2 to 20 s/cm. The unit is self-contained, external, and designed to directly plug into the 7035B input terminals. Any number of recorders may be driven simultaneously, provided the combined parallel input resistance is 20 kΩ or more.

7035B Specifications

Performance specifications

Input ranges

Metric: 0.4, 4, 40, 400 mV/cm and 4 V/cm.

English: 1, 10, 100 mV/in.; 1 and 10 V/in. Continuous vernier between ranges.

Types of inputs: floated and guarded signal pair; rear input connector.

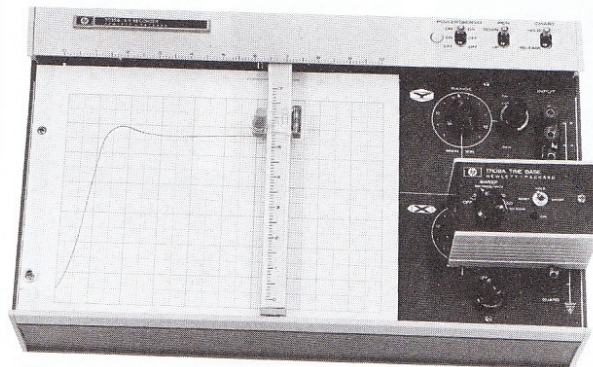
Input resistance

Range	Input resistance
0.4 mV/cm (1 mV/in.)	Potentiometric (essentially infinite at null)
Variable	11 kΩ
4 mV/cm (10 mV/in.)	100 kΩ
Variable	100 kΩ
40 mV/cm (100 mV/in.)	1 MΩ
Variable	1 MΩ
400 mV/cm (1 V/in.)	1 MΩ
Variable	1 MΩ
4 V/cm (10 V/in.)	1 MΩ
Variable	1 MΩ

Normal mode rejection: >30 dB at 60 Hz; 18 dB octave above 60 Hz.

Maximum allowable source impedance: no restrictions except on fixed 0.4 mV/cm (1 mV/in.) range. Up to 20 kΩ source impedance will not alter recorder's performance.

- Disposable pens



7035B with 17108A

Accuracy: ±0.2% of full scale.

Linearity: ±0.1% of full scale.

Resetability: ±0.1% of full scale.

Zero set: zero may be set up to one full scale in any direction from zero index. Lockable zero controls.

Slewing speed: 50 cm/s, (20 in./s) nominal at 115 V.

Common mode rejection: conditions for the following data are line frequency with up to 1 kΩ between the positive input and guard connection point. Max. dc common mode voltage is 500 V.

Range	DC (CMR)	AC (CMR)
Metric		
0.4 mV/cm	130 dB	100 dB
4 mV/cm	110 dB	80 dB
40 mV/cm	90 dB	60 dB
400 mV/cm	70 dB	40 dB
4 V/cm	50 dB	20 dB
English		
1 mV/in.		
10 mV/in.		
100 mV/in.		
1 V/in.		
10 V/in.		

General specifications

Paper holddown: autogrip electric paper holddown grips 216 mm × 279 mm (8½ in. × 11 in.) charts or smaller. Special paper not required.

Pen lift: electric pen lift capable of being remotely controlled.

Dimensions: 265 mm H × 445 mm W × 121 mm D (10⅞" × 17½" × 4¾").

Weight: net, 8 kg (18 lb). Shipping, 10.9 kg (24 lb).

Power: 115 or 230 V ±10%, 50 to 60 Hz, approximately 45 VA.

17108A Specifications

Sweep speeds: 0.2, 0.4, 2, 4, 20 s/cm (0.5, 1, 5, 10, 50 s/in.).

Accuracy: 5% of recorder full scale.

Linearity: 0.5% of full scale (20°C to 30°C).

Output voltage: 0 to 1.5 V.

Power: replaceable mercury battery (100 hr).

7035B Options and accessories

Opt 001: metric calibration

Opt 003: retransmitting potentiometer on X-axis 5 kΩ ±3%

Opt 020: modification for use with models 3580A and 3581A/C

Opt 908: rack mount kit

Opt 910: extra manual

17108A Time Base Plug-In

17108AM Time Base Plug-In (metric)

17024A Recorder Supplies Starter Kit—English

17025A Recorder Supplies Starter Kit—Metric

7035B General Purpose X-Y recorder