

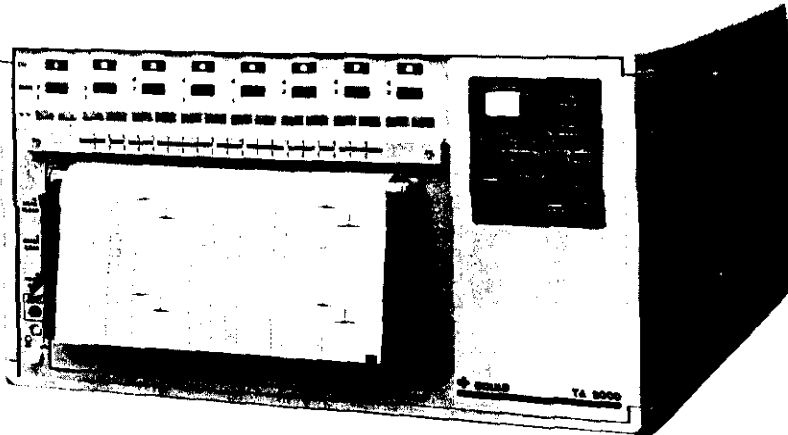


Advanced Test Equipment Rentals

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GRAPHIC RECORDERS

TA 2000 THERMAL ARRAY RECORDER



TA 2000 Stand Alone Unit

- 1 to 8 analog channels
- Frequency response 5 kHz
- Peak capture of events 150 μ s or longer
- 200 dots/in. amplitude resolution (8 dots/mm)
- 200 mm/s maximum chart speed
- Overlapping traces
- Compatible with Gould 4600 and 5600 Signal Conditioners

The penless digital writing system of the TA 2000 features a high resolution (8 dots/mm) linear thermal array head. This head is composed of closely spaced stationary heating elements which allow simultaneous printing of traces, grid lines and alphanumeric annotation. Because the writing system has no moving parts, there are no mechanical or inertial limits usually associated with pens or galvanometers. The result is high frequency response, no trace overshoot, and the ability to overlap traces. Also, traces may be written across the full 200 mm chart width.

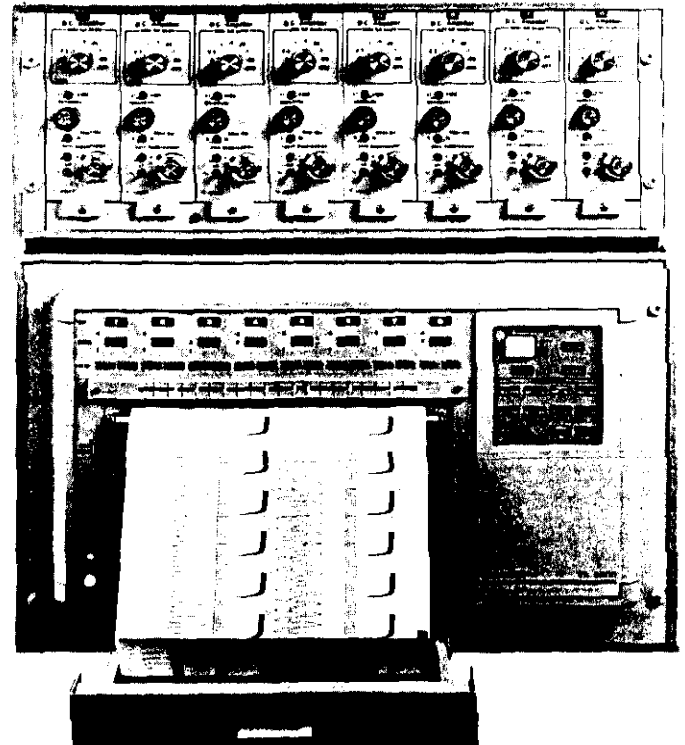
The TA 2000 was designed with the user in mind. The front panel is composed of instantly recognizable keys that provide positive audible, tactile and visual feedback. Position keys allow movement of the trace in precise 10-mm increments across the chart making formatting a simple task. A row of LEDs just above the paper exit follows all signals in real time eliminating the need to run the chart during setup.

Frequency response is less than 3 dB down on a continuous 5 kHz sine wave. Peak capture of events as short as 150 μ s with no trace degradation is another benefit of TA 2000 array technology.

Three modes of chart operation allow continuous recording, or paper conservation when ongoing recording is not needed. The user simply programs the chart to run and stop or change speeds at specific time intervals. New *Chart* mode emulates a 4-channel pen recorder with separate 40-mm channel grids.

Real time, day/date and chart speed annotation are printed once per page. Channel identification can be enabled from the front panel. Full page of user text and 8-character parameter identification can be entered via the RS-232C interface a host computer. Also, all front panel functions can be remotely controlled via the RS-232C interface.

When combined with Gould's more than 40 general and special purpose signal conditioners, the TA 2000 provides unparalleled application flexibility to meet your specific recording requirements.



TA 2000 Bench Top Unit

MODEL TA 2000 SPECIFICATIONS

Number of Analog Channels: 1 to 8 channels real time recording.

Event Marker: 2 mm wide mark at left chart edge when MARK key is depressed or activated via remote control connector.

Marking Method: Single fixed thermal array head.

Recording Width: 200 mm FS (recording is possible across full 8½ inches of chart paper).

Amplitude Resolution: 200 dots/in. (8 dots/mm).

Time Axis Resolution: 8 lines/mm (at 200 mm/s).
16 lines/mm (at 100 mm/s). 32 lines/mm (at 50 mm/s).
48 lines/mm (at 25 mm/s).

Frequency Response: 5 kHz (<3 dB down). Peak capture of events 150 µs or longer. Both specs independent of number of channels recorded or trace amplitude.

Analog Inputs: Single ended, grounded ± 5 V FS (10 V span).
In Chart mode, ± 2.5 V FS.

Input Impedance: 100 kΩ ± 10%.

Sensitivity: x1, 1 V/cm; x2, 0.5 V/cm; x4, 0.25 V/cm.

Chart Speeds: 1, 2.5, 5, 10, 25, 50, 100,
200 mm/s and mm/min.

Timing Marks: Recorded in three lengths along both edges of chart paper.

Range	Long	Print Interval		Speed	Long	Normal	Short
		Normal	Short				
mm/s	10 s	1 s	0.1 s	1	x	x	-
mm/min.	10 min.	1 min.	0.1 min.	2.5	x	x	-
				5	x	x	-
				10	x	x	-
				25	x	x	x
				50	-	x	x
x Printed				100	-	x	x
- Not Printed				200	-	x	x

Chart Speed Accuracy: ± 3%.

Motor: Servo-controlled DC motor, quiet continuous drive.

Recording Modes: Continuous — Manual chart drive start/stop from front panel. Periodic — Chart drive starts and stops automatically at time intervals selected from front panel.

Alternate — Chart drive switches between two chart speeds at time intervals selected from front panel. Chart — emulates pen recorder with four 40-mm channels.

Grid Line Printing: Selectable from front panel; Grids OFF, 10x10 mm and 5x10 mm grids each with selectable 1x1 mm fine grid.

Annotation: Date, Time and Chart Speed are printed once per page. User defined full page (48 lines x 80 columns) and 8 character parameter identification possible via RS-232C interface.

Channel Identification: Channels successively identified once per page by a thin line from the corresponding trace to a three character field (CH1, CH2, etc.). Turned on or off from IDENT Key.

Chart Paper Description: High Sensitivity Thermal Paper, 8½ x 11 inch, Z-fold, 11-inch fold length, 350 sheets.

Chart Paper Capacity: 325 ft. (107 m).

Chart Paper Take-up Drawer: Collects full paper capacity. (Standard with rack mount and portable systems.)

Remote Control: Chart Start/Stop and Event Mark can be controlled from rear panel remote connector via contact closure.

RS-232C Interface: The following functions are possible via the interface; control of all front panel functions, full page (48 lines x 80 columns) of annotation, 8 character parameter identification.

Operating Input Voltage: 100-125 VAC, 50/60/400 Hz. 200-240 VAC, 50/60 Hz.

Input Power: Typical — 100 VA. Maximum 500 VA.

Battery Back-Up: Maintains front panel settings and time/date for 30 days.

Weight: Stand Alone — 53 lbs. (24 kg). Portable System — Recorder 65 lbs. (29.5 kg). Cage 34 lbs. (15.4 kg).

Dimensions: Stand Alone — 17 in. (430 mm) W x 10 in. (248 mm) H x 17 in. (430 mm) D. Bench Top: Recorder — 20 in. (506 mm) W x 13.5 in. (341 mm) H x 17 in. (430 mm) D. Cage — 20 in. (506 mm) W x 8.25 in. (209 mm) H x 19 in. (480 mm) D. Rack mount — 19 in. (480 mm) W x 12.25 in. (310 mm) H x 17 in. (430 mm) D.

Operating Temperature: 5° to 40° C.

Standard Models

Model Number	Description
3008-8510-43	Stand Alone Unit, 115 V 50/60/400 Hz
3008-8510-44	Stand Alone Unit, 230 V 50/60 Hz
3008-8511-43	Bench Top Unit with 5900 Signal Conditioner Cage, 115 V 50/60/400 Hz
3008-8511-44	Bench Top Unit with 5900 Signal Conditioners, 230 V 50/60 Hz
3008-8512-43	Rack Mount System (less Signal Conditioners), 115 V 50/60/400 Hz
3008-8512-44	Rack Mount System (less Signal Conditioners), 230 V 50/60 Hz
3008-8513-43	Bench Top Unit without Signal Conditioner Cage, 115 V 50/60/400 Hz
3008-8513-44	Bench Top Unit without Signal Conditioner Cage, 230 V 50/60 Hz

Accessories

Model Number	Description
11-1202-37	Rack Mount Kit for Stand Alone Unit
CL-810971	Input Cable ("Blue Ribbon" to 8 Molex)
11-4310-25	Molex-BNC adapter
11-4310-23	Molex-Spade Lug adapter
11-4310-24	Molex-Bantam Plug adapter
369500-21509	RS-232C Cable (TA 2000 - IBM PC/XT)
369500-21508	RS-232C Cable (TA 2000 - IBM AT)
249334-14	Input Connector, mating
245537-9	Remote Control Connector (order with 284428-9 shell)
284428-9	Remote Connector Shell
11-6405-05	Mobile Cart for Portable System
A50009	Mobile Cart for Stand Alone TA 2000