

Model 4320 Programmable Digital Timer

The *Genuine Gurley™* Model 4320 Programmable Digital Timer not only increases the accuracy and productivity of Gurley densometers, but provides recording and computing capabilities that will absolutely minimize the possibility of operator error.

The 4320 features innovative user-friendly software with the option of using a built-in tutorial for step by step instructions. Its clean ergonomic design features large keys, an adjustable backlit display, tactile and audible feedback and a number of programmable options. For the inexperienced technician as well as the seasoned engineer, the 4320 is an indispensable instrument.

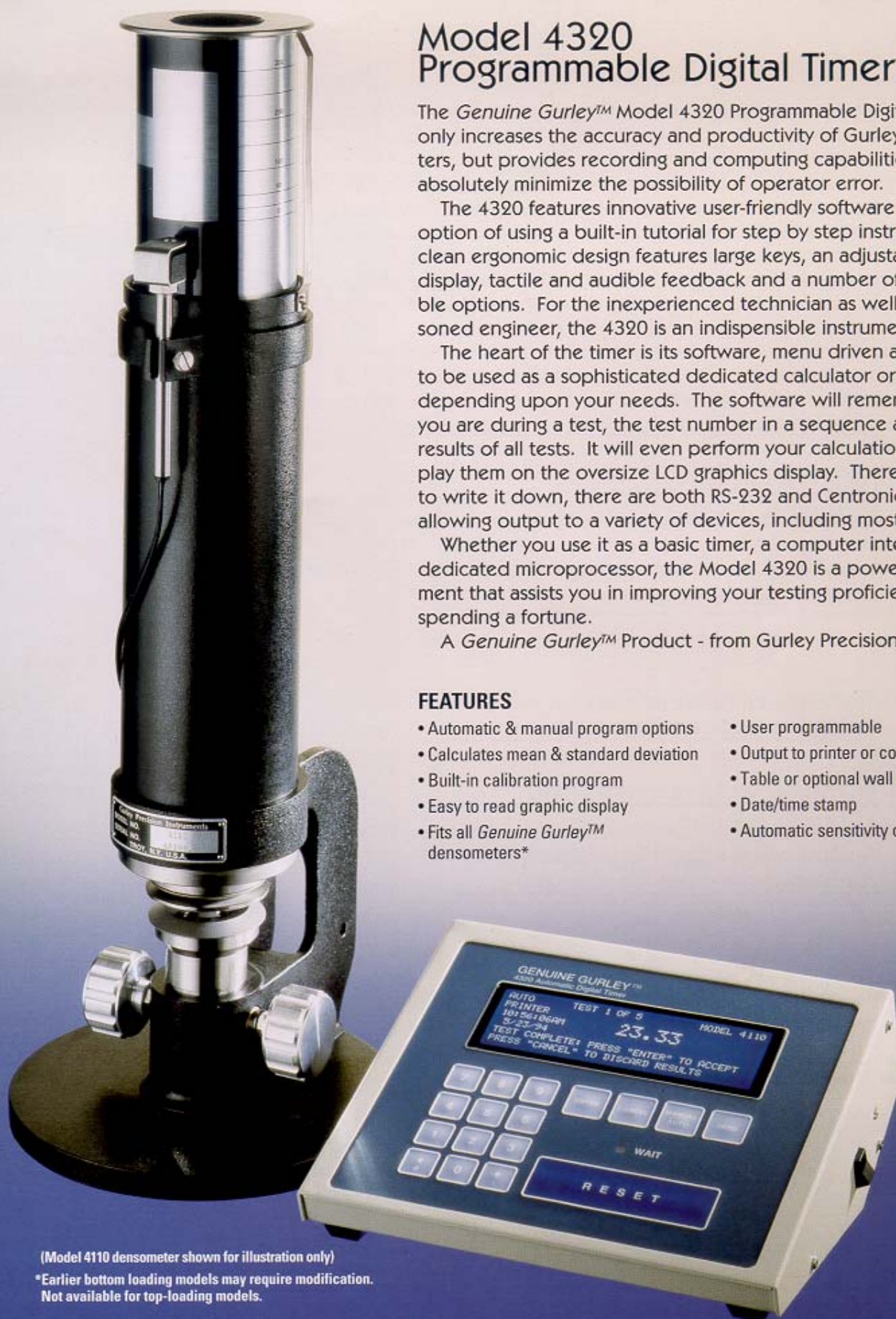
The heart of the timer is its software, menu driven and designed to be used as a sophisticated dedicated calculator or timer alone, depending upon your needs. The software will remember where you are during a test, the test number in a sequence and the results of all tests. It will even perform your calculations and display them on the oversize LCD graphics display. There is no reason to write it down, there are both RS-232 and Centronics outputs, allowing output to a variety of devices, including most printers.

Whether you use it as a basic timer, a computer interface or a dedicated microprocessor, the Model 4320 is a powerful instrument that assists you in improving your testing proficiency without spending a fortune.

A *Genuine Gurley™* Product - from Gurley Precision Instruments.

FEATURES

- Automatic & manual program options
- Calculates mean & standard deviation
- Built-in calibration program
- Easy to read graphic display
- Fits all *Genuine Gurley™* densometers*
- User programmable
- Output to printer or computer
- Table or optional wall mount
- Date/time stamp
- Automatic sensitivity calibration



(Model 4110 densometer shown for illustration only)

*Earlier bottom loading models may require modification.
Not available for top-loading models.

Centronics printer output for most parallel printers

To densometer reading head

RS-232 Serial communications port to your computer.

To power supply - 110 V 60 Hz, 220 V 50 Hz or variable

Built-in clock and calendar - Automatic date stamp of tests

Large, easy to read LCD display
Wide-angle, adjustable brightness

Ergonomic design for operator comfort. Minimizes fatigue

Resilient membrane keypad - tactile feedback confirms entry

Adjustable wall mount (optional)

Audible alarm adjusts to minimize confusion with other lab sounds

Remote reset jack

On/Off switch

Built-in battery back-up

Field replaceable software (optional)

5 simple keys control most functions

NEW READING HEAD DESIGN

GENUINE GURLEY™
4320 Automatic Digital Timer

AUTO TEST 1 OF 5 MODEL 4110
PRINTER
2:10:20PM 20.33
5/23/94
TEST COMPLETE: PRESS "ENTER" TO ACCEPT
PRESS "CANCEL" TO DISCARD RESULTS

7 8 9 ENTER CANCEL MANUAL/AUTO SEND
4 5 6
1 2 3
* 0 .

WAIT

R E S E T

SPECIAL FEATURES

A Choice of Modes and Settings

Customize the Model 4320 to fit your particular requirements with a range of features like Display contrast, Date stamping, Printer output, RS-232 computer interface, Built-in tutorial, Instrument model identification and much more.

Automatic Calibration Program

The start-up routine reminds you to check the instrument's calibration, remembers the value of the calibration plate, and advises whether the results are within the recommended tolerances.

There Is More!

This is a software based instrument and it is Gurley's intention to add additional features in a timely fashion. Contact us at any time with your comments. Custom options are available at an additional cost.

Built-In Calculator

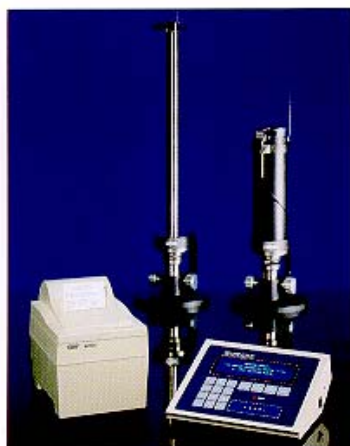
In automatic mode the Model 4320 remembers each test. At the end of a sequence it quickly calculates all values, shows them on its bright LCD display and prints them as well.

Automatic & Manual Functions

Choose between individual readings in manual mode or the convenient automatic mode that remembers everything, reminds you where you are, offers optional statistical features and performs all calculations...effortlessly.

No sensitivity knob

The new reading head and its self-calibrating software eliminate the old adjustment routine. The Model 4320 performs its own sensitivity adjustments that assure you of continually reliable performance.



Fits all Genuine Gurley™ Densometers

The model 4320 and its reading head fit densometers manufactured by W. & L.E. Gurley, Teledyne Gurley and Gurley Precision Instruments. Model 4110-based models without timers require a mounting clamp (PN.22185). Older models may require modification at additional charge.

If You Have An Older Model Timer

Customers with Models 4136, 4137 or 4138 can save money purchasing a new Model 4320 by using their old reading head if it has a black plastic connector. Order Model 4320-4 for 120 V 60 hz and Model 4320-5 for 240 V 50 hz. Both models come with an adaptor plug instead of the reading head.

Basic Operation

Use the densometer as you would normally. The large and bright LCD display of the Model 4320 will alert the

operator to normal safeguards and sequences. To run a manual test, press reset, release the cylinder and wait for the results. In automatic mode, the display will remind you what step you are on and when the series of tests is completed, it will display the results as well as send them to the optional printer.

Printer Options

Use our compact roll-fed printer that features a small footprint and an economical 3" wide roll good for hundreds of printouts or your own parallel printer and cable.



Mounting – Counter top or Wall

The Model 4320's custom ergonomic cabinet sits firmly on any flat surface for ease in use whether the operator is standing or sitting. For facilities with limited space or looking for a less cluttered work area, order the adjustable wall bracket option.

Power Requirements

The design of the Model 4320 series is modular and utilizes an external compact power supply. Order the appropriate model for your requirements.

| | |
|---------|-----------------------------------|
| 4320 DN | 110 VAC 60 hz |
| 4320 EN | 220 VAC 50 hz |
| 4320 UN | 90-250 VAC 47-440 hz, 110-350 VDC |
| 4320-4 | 110 VAC 60 hz |
| 4320-5 | 220 VAC 50 hz |

Printer Connections

The parallel port is an industry standard, 36 pin Centronics connector which is compatible with most printers.

Computer Connections

The serial port is a standard 25 pin female D connector which allows an easy interface to any IBM compatible PC or other DTE type device. This supports 2400, 9600, 19.2K and 38.4K baud with Xon/Xoff or RTS/CTS handshake.

For further information, contact your dealer or call us directly.

In continuing our policy of product improvement, Gurley Precision Instruments reserves the right to change parts, models, prices and specifications without notice.

Gurley
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