Introducing the new generation of programmable calculators...with revolutionary *Solid State Software*™ ...from Texas Instruments.

The world's most advanced programmables. Performance. Capability. Quality. *Value.*

5,000 program steps in a tiny, plug-in module. The TI Programmable 58 and TI Programmable 59 introduce a major technological advance in handheld programmable calculators – Solid State Software™. Each prerecorded program library contains up to 5,000 steps, providing significant additional program memory capability and programming flexibility.

The TI Programmable 58 and TI Programmable 59 offer the most advanced features available. Anywhere. Use interchangeable Solid State Software™ modules, or enter programs you develop right from the keyboard. (The TI Programmable 59 also has magnetic card read/write capability.)

Both programmables feature computer-like power and versatility with subroutines, looping, flexible addressing, editing capabilities – and much more. And both can be quickly converted to powerful alphanumeric printers with TI's optional PC-100A (see back page).

The Master Library software module, included with the TI Programmable 58 and 59, provides 25 prewritten programs in math, statistics, finance, and other application areas. Additional libraries are available from a selection of optional Solid State Software™ modules.

The TI Programmable 58.

The advanced key programmable calculator with plug-in Solid State Software™ libraries.

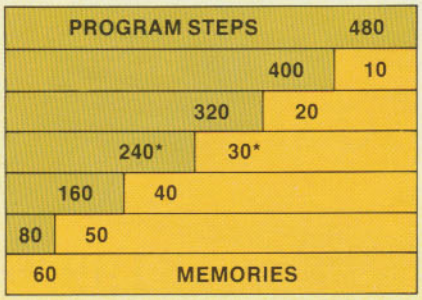
$124.95*

The TI Programmable 59.

The super-powerful card programmable with Solid State Software™ libraries *and* magnetic cards.

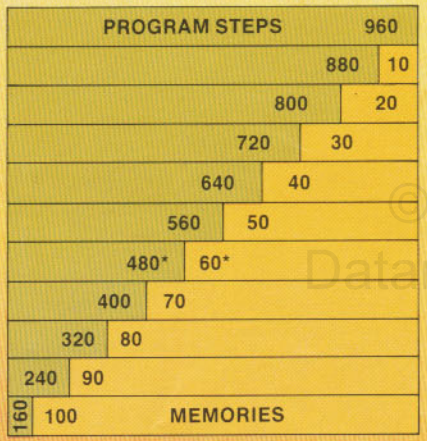
$299.95*

The TI Programmable 58 and TI Programmable 59 present a significant new flexibility in program step/memory allocation. Flexible storage lets you vary the allocation between program steps and memory. The TI Programmable 58 provides up to 480 program steps or up to 60 memory registers:



*Calculator in this configuration when turned on. May be changed from the keyboard or in a program.

The TI Programmable 59 provides up to 960 program steps or up to 100 memory registers:

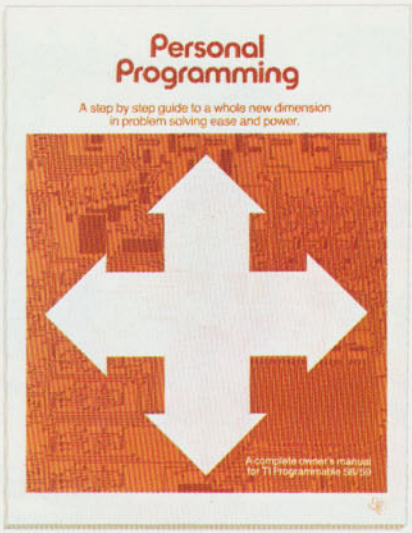


*Calculator in this configuration when turned on. May be changed from the keyboard or in a program.

These partitioning features allow you to tailor program step/memory resources to meet your requirements.

Plus, features to help you easily handle complex math problems. Both calculators utilize TI's AOS™ algebraic operating system, providing easy, straightforward problem entry. Powerful slide rule functions include logs, trig, and advanced statistics.

*U.S. suggested retail price; may vary elsewhere.



Step-by-step learning guide shows you how to get the most out of your TI Programmable 58 or 59.

Personal Programming replaces the traditional owner's manual and allows you to put your TI Programmable 58 or TI Programmable 59 to work more quickly. In a critical review by Ron Snyder of *The Washington Star*, it was described as a "new standard in writing owner's manuals....You are swept away into what previously seemed to be a totally forbidden world and find yourself enjoying and understanding every moment of the trip."

In step-by-step fashion, *Personal Programming* takes you through a self-paced course, from simple techniques to advanced programming details. You'll learn how to put the programs in your Master Library Module to work immediately. How to teach the calculator to remember and execute your programs. And, how to use its power when programs aren't needed. A comprehensive selection of examples allows you to apply the power of programming to your particular personal or professional interests.

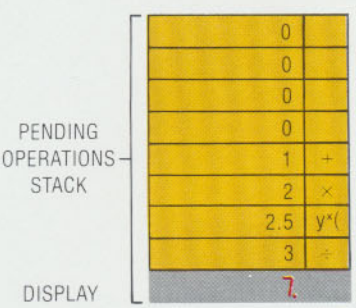
Prove to yourself how easy and effective programming can be with this easy to understand learning guide.

AOS™. Texas Instruments unique algebraic operating system makes the calculator part of the solution, not part of the problem.

What is AOS?
AOS is more than just algebraic entry. It's a *full* mathematical hierarchy coupled with multiple levels of parentheses. This means more pending operations, as well as easy left-to-right entry of expressions—both numbers and functions.

Mathematical hierarchy.
This is the universally recognized order of performing calculations. Functions first. Powers and roots. Multiplication or division. Then addition or subtraction. AOS performs calculations in this order automatically. But, you have the option to change the order whenever you wish by using the parentheses keys.

AOS *remembers* the numbers *and* functions in its pending operation stack. And processes them according to mathematical hierarchy. As more operations become pending, the stack fills up. As operations are completed, the stack empties into the display.



The case for AOS is strong.
That's why TI chose it. We think you'll prefer AOS. Because you begin using it immediately. There's no new language to learn. And, even if you are already conditioned to some other form of entry system, the added value and power of TI's programmable calculators with unique AOS is well worth the easy transition.

Compare the power and features of the TI Programmable 58 and 59 with any other programmable calculators available today.

	TI-58	TI-59
MEMORIES		
Program memory		
Maximum number of steps	480	960
Expandable	•	•
Merging – fully merged		
semi merged*	•	•
Solid-state software	•	•
Number of steps	5.000	5.000
Program down load into RAM	•	•
Useable as subroutine to expand program memory size	•	•
Useable as separate program	•	•
Data memory		
Maximum number of registers	60	100
Expandable	•	•
Addressing – absolute	•	•
– indirect	•	•
– max. no. of index registers	60	100
– short form	•	•
– EXCH	•	•
– increment/decrement registers	•	•
PROGRAMMING		
Program edit – SST/BST, pause	•	•
Program edit – insert/delete	•	•
PROGRAM CONTROL		
Conditional branching		
Numeric comparisons		
$x=t, x\neq t, x<t, x\geq t, x=0$		
$x\neq 0, x<0, x\geq 0$ (t register = 0)	•	•
Independent comparison (t register)	•	•
Flags (Boolean comparison)		
Number of flags	10	10
Set/reset flag, test flag	•	•
Test on error (if error/if not error)	•	•
Loop control		
Increment/decrement (branch on zero)	•	•
Increment/decrement (branch on not zero)	•	•
No. of index registers (direct address)	10	10
No. of index registers (indirect address)	60 max.	100 max.
Unconditional – No. of levels of subroutine	6	6

	TI-58	TI-59
Branch addressing types		
Absolute	•	•
Relative		
Indirect	•	•
Label	•	•
Short form	•	•
Label addressing		
User defined keys	10	10
No. possible labels	72	72
User control keys		
NOP	•	•
Clear Program	•	•
Clear t register	•	•
RST	•	•
Program step/data memory repartition	•	•
MAGNETIC I/O		
Capacity per card – steps		480
– registers		60
Read/write program/data		•
Autoload with override		•
PRINTING		
Print alpha, plot, list labels	•**	•**
Print numerics, list, trace	•**	•**
OPERATING SYSTEM		
Entry system	AOS	AOS
No. of pending operations	8	8
No. of sets of parentheses	9	9
No. of stack registers	9	9
FUNCTIONS		
Scientific, trig, DRG, pol/rect, DMS	•	•
Integer, fraction, absolute value	•	•
Linear regression, trend line, correlation coefficient	•	•
DISPLAY FORMAT		
VLED Characters	8+2, 10	8+2, 10
Scientific notation	•	•
Engineering notation	•	•
OPERATING CHARACTERISTICS		
Internal digits	13	13

*Memory address, second functions and other key sequences.

**With optional printer.

FREE-Leisure Library.

When you buy a TI Programmable 58 or 59.

A $35 value if you act now.

Leisure Library includes plug-in Solid State Software module, library manual, quick-reference guide, label cards, and library wallet. 19 fun programs: Football Predictor. Bowling Scorekeeper. Golf Handicapper. Bridge. Chess Rankings. Codebreaker. Black Jack. Acey Ducey. Craps. Mars Lander. Jive Turkey. Nim. Sea Battle. Quarterback. Photo I and II. For use in conjunction with the PC-100A there's Hangman, Memo Pad, Biorhythm, Computer Art.

Offer good from August 15 to October 31, 1977.

Fill out this coupon. Return it to TI with your serialized Customer Information Card (packed in the box), along with a copy of a dated proof of purchase showing the serial number. **IMPORTANT** Your envelope must be postmarked no later than October 31, 1977.

Texas Instruments Leisure Library Offer
P. O. Box 53, Lubbock, Texas 79408

Name _____

Address _____

City _____

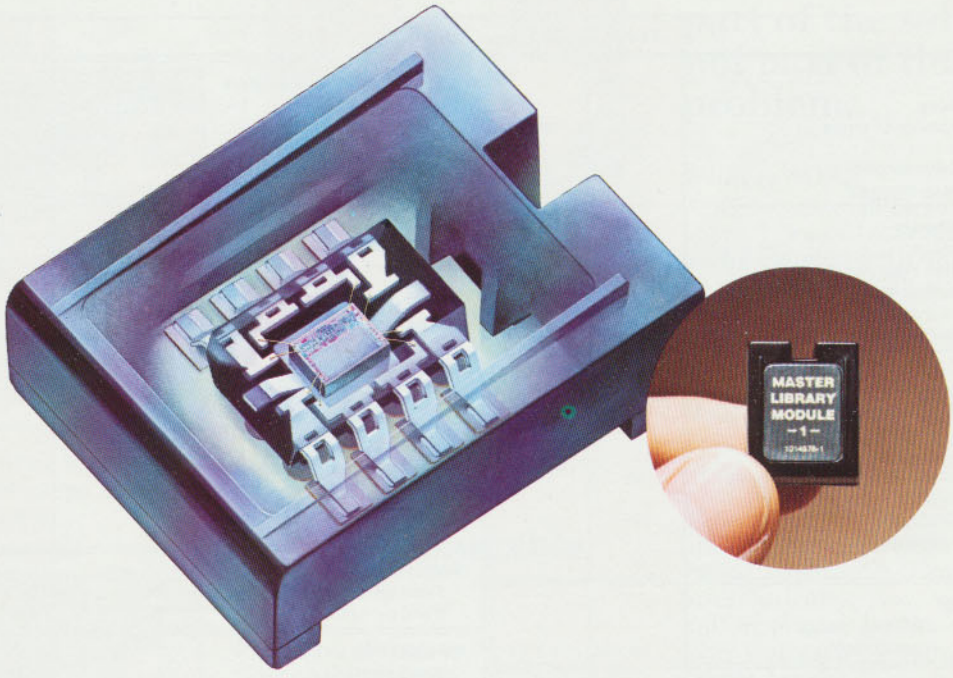
State _____ Zip _____

Texas Instruments reserves the right to substitute software libraries of equal value based on availability. Please allow 30 days for delivery. Offer good in United States and Canada only. Offer void where prohibited by law.

SA9

Solid State Software™

Plug-in library modules give you up to 5,000 additional program steps!



A new dimension in micro-memory technology.
TI's state-of-the-art Solid State Software™ libraries combine the advantages of prewritten programs with the convenience of compact, easy-to-use, plug-in modules. Information that once required up to 25 magnetic cards can be contained in one small module. Simply insert the desired module and access a program in seconds, with just a few keystrokes. They bring the power of programming within easy reach, even if you have never programmed before. Use the 5,000-step module by itself. Or, use it as a base and call subroutines from your magnetic card or keyed-in program. You can also use your program as a base and call subroutines from the module. And much more.

Master Library.
The Master Library Solid State Software™ module is included with the TI Programmable 58 and TI Programmable 59. A selection of 25 prewritten programs in mathematics, statistics, finance, and other application areas, it provides the professional with a "tool kit" of preprogrammed solutions to a wide variety of problems.

Optional libraries.
Optional Solid State Software™ plug-in libraries let you customize your TI Programmable 58 or TI Programmable 59 into a specialized problem solver. Choose from Statistics, Real Estate and Investment, Surveying, Aviation, Marine Navigation.

PPX-59 lets you share programs.

TI's Professional Program Exchange (PPX) makes hundreds of programs available to you. Programs developed, tested, and submitted by your professional peers. And, you can submit programs you develop for possible inclusion. Your yearly PPX-59 membership provides you with a source catalog, 3 free programs of your choice, a bi-monthly newsletter, and a member's guide and program submission forms.

FREE Solid State Software™ offer. See details inside.

Send for free 16-page brochure.

Want to know more? This 16-page color brochure is packed with information on TI's new handheld programmables. Contains detailed descriptions and specifications on these exciting calculators. For your free copy write to: Brochure Offer, Texas Instruments, P. O. Box 53, Lubbock, TX 79408.

Print alphanumerics. Plot data.

The PC-100A turns your TI Programmable 58 or 59 into a quiet, high-speed printing/plotting calculator.

$199.95*

Simplifies program editing.

The PC-100A prints fast. Over 60 characters/second with its quiet thermal printer. So you get listings fast. Just push the LIST key for a printout of the entire program memory.

```
037  76 LBL
038  14  D
039  53  (
040  35 1/X
041  65  ×
042  61 GTO
043  15  E
044  76 LBL
045  11  A
046  58 FIX
047  09  09
048  88 DMS
049  42 STO
050  01  01
051  92 RTN
052  00  0
```

See each program step executed.

Push the TRACE key. Now every calculation that's performed in your program is printed. The full number and the operation.

*U.S. suggested retail price, may vary elsewhere.
All tape printouts shown approximately 60% of actual size.

Program headings.

Printed headings for your programs provide easy reference and identification. You can even annotate data on printouts.

```
PORTFOLIO ANALYSIS

      48.75    COST
     3200.     SHRS
       85.     MRGN
```

User prompting.

Use the alpha printing capability of the TI Programmable 58/59/ PC-100A combination to enter prompting messages right in your program.

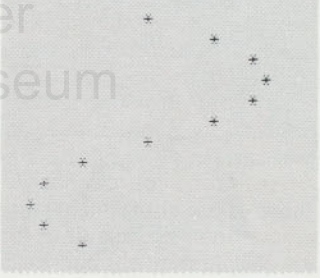
```
ENTER TEMPERATURE
        76.3

ENTER PRESSURE
        749.4
```

Data plotting.

The PC-100A allows you to input data from your TI Programmable 58 or 59 and plot curves and histograms. You can make a plot of data directly from the calculator keyboard or automatically from a program.

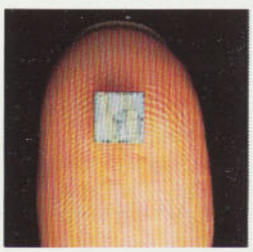
```
SINE CURVE PLOT
SAMPLED EVERY 30 DEG
```



```
*****                JAN
***************      FEB
**********           MAR
```

And other features.

List registers. Program labels. There's even a handy, built-in battery charger for your calculator's battery pack. Whether for school, technology, or business and finance, the uses for the PC-100A are limited only by your imagination.



Continuing revolutionary advances from Texas Instruments ...the leader in electronic technology.

When you judge the value of a high-technology product, it pays to look closely at the company behind the product. TI invented the original integrated circuit and the "calculator-on-a-chip" that ignited the calculator revolution.

As the world's leading producer of integrated circuits, TI holds the basic patent on the miniature calculator itself...and is a world leader in the production of electronic calculators. Performance. Capability. Quality. Value. TI.

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