

# TI 59 Programmable

The super-powerful card programmable with TI's...

revolutionary plug-in  
Solid State Software™  
modules.



Up to 960 program steps.  
Or, up to 100 memories.

TEXAS INSTRUMENTS  
INCORPORATED



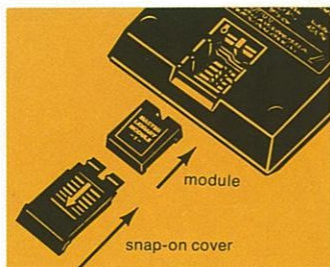
# An extraordinary card programmable calculator. With **Solid State Software™**. Plus magnetic card storage. For leading-edge professionals in business, science, engineering.

**The Programmable 59 – a revolutionary new advance in personal programmable calculators. It offers enormous calculating power, magnetic card storage plus TI's exclusive Solid-State Software – capability, quality and value unchallenged by any other calculator in its class. The ultimate programmable.**

The Programmable 59 is truly computer-like. You have up to 960 program steps, or up to 100 memories to work with. And, when integrated with the Master Library module it delivers up to 5000 steps!

## **What's Solid State Software™?**

Prewritten programs that once occupied almost two dozen magnetic cards have been encapsulated in a tiny plastic module small enough to sit on your thumbnail.



This revolutionary Master Library module is a product of TI's micro-memory technology. It simply plugs into the calculator. Then any one of 25 different programs is available at the touch of a key. Programs that include math, statistics, finance – virtually a basic tool kit for today's professional. And it's also interchangeable with five other optional libraries.

**Blank magnetic cards too.** So you can write and record your own programs for your personal library to use whenever you wish. You may also

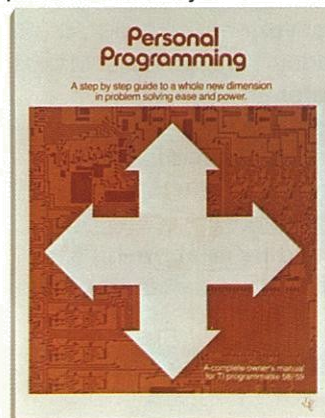
make your program confidential so that no one but you can "look" at it.

**It also has AOS™** TI's algebraic operating system which lets you enter programs just as they're written with up to nine sets of parentheses.

**Personal Programming, an exclusive, added-value book, starts you programming immediately. Even if you've never programmed before.** It unlocks the power of your calculator in language you can understand, allowing you to use your Programmable 59 with confidence – straight-off.

This convenient manual takes you through each function, each operation – step by step. It'll help you prove to yourself how easy and effective programming can be. You'll learn how to put the programs in the Master Library to work, how to develop your own custom programs, and how to explore the full calculating power of the Programmable 59 when programs aren't needed.

You'll find plenty of illustrated examples. And many will be highly adaptable to work you do: Bond cost. Spherical coordinates. Investments. Quadratic equations. And much more. Finally, should you already know how to program, you can find the advanced programming details in one convenient section.

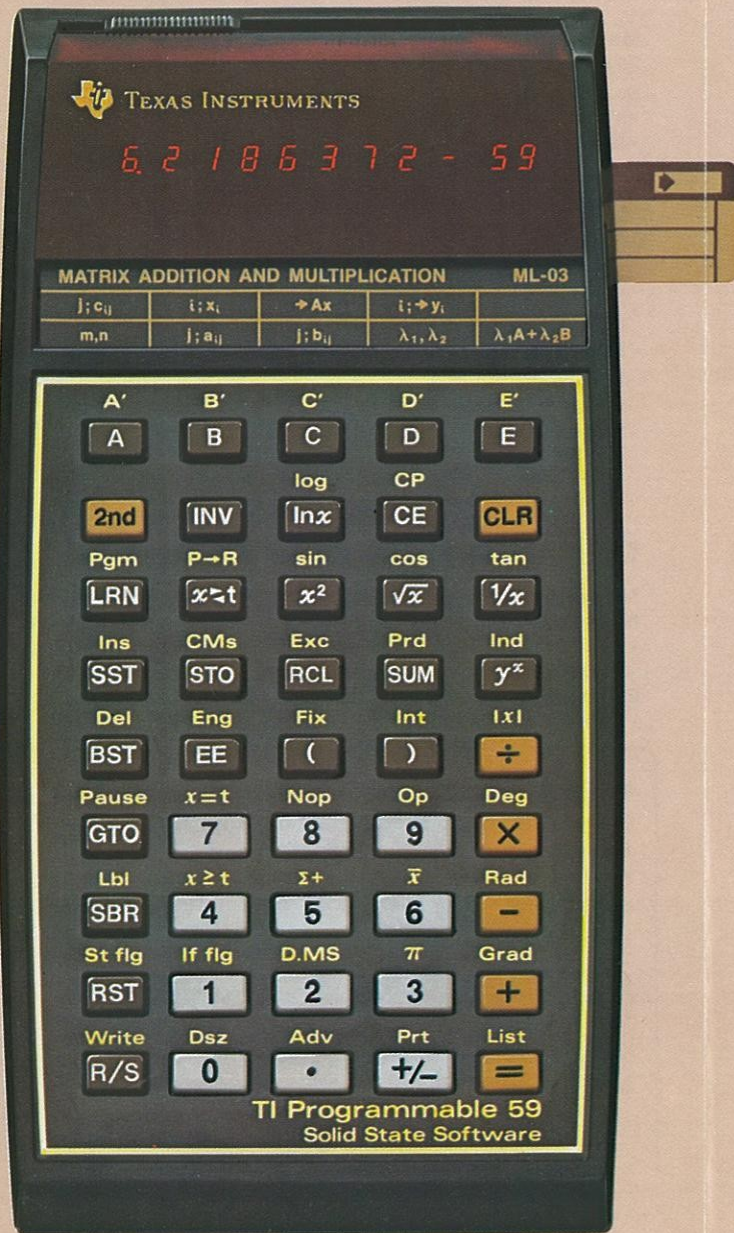




# TI Programmable 59.

## Up to 960 program steps.

## Or, up to 100 memories.



Program steps and memory registers are resources that can be allocated to meet your needs. Short problems with many numbers could require nearly all 100 memories—like budgets or statistical analyses. While long problems with lots of operations and few variables could require almost all 960 program steps—like stock options or orbital mechanics. The TI-59 gives you the flexibility to select a broad variety of combinations.

PROGRAM STEPS		960
		880
		10
		800
		20
		720
		30
		640
		40
		560
		50
		480*
		60*
		400
		70
		320
		80
		240
		90
100	MEMORIES	

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

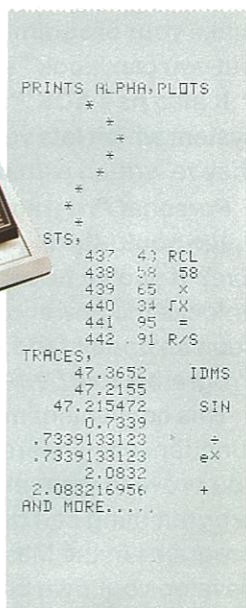
### Features of the powerful TI Programmable 59:

- 4 types of display testing with an independent test or "t" register:  
 $X \geq t$     $X < t$     $X = t$     $X \neq t$
- Up to 10 additional test registers directly available for: Looping. Increment. Decrement.
- Up to 10 user flags available: Set. Reset. Test.
- 72 useful labels.
- Up to 6 levels of subroutines available.
- Extremely flexible addressing of:
 

<b>Program Steps:</b>	<b>Data Memories:</b>
1. Absolute	1. Direct
2. Indirect	2. Indirect
3. Label	
- Complete program editing: Insert. Delete. Single step. Backstep. No-Operation.
- 10 user defined label keys.
- AOS™ algebraic operating system allows easy, straightforward problem solving. Key in your problem left-to-right, just as you would read or write it in standard mathematical terms.
- Up to 9 sets of parentheses (allowing up to 8 pending operations in your machine) provide extended problem solving capability.
- Over 175 functions and operations in scientific, engineering and statistical fields.



# The TI Programmable 59 also works with TI's PC-100C thermal printer, plotter\*.



The convenience and efficiency of hard copy printouts are yours with TI's exclusive PC-100C printer.

- Print data, intermediate results, and answers.
- Print alphanumeric messages.
- List your entire program. Step numbers. Key codes. Key symbols. Makes program editing faster and easier.
- List the contents of all data memories.
- List labels and location.
- Print program headings and prompting messages.
- Plot data relationships.
- Recharges calculator battery.

(1/2 Actual Size)

\*Also works with PC-100A printer, plotter.  
Will not work with PC-100 printer.

# Plug-in Solid State Software™ Library. Puts pre-written programs at your fingertips.

## Master Library Module.

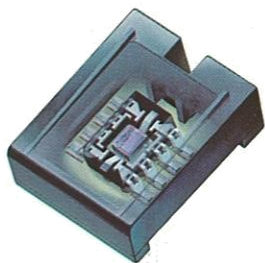
25 programs included. Gives professionals an instant "tool kit" in key areas:

### • Math

- Matrix operations (2)
- Complex Functions (3)
- General Polynomial Evaluation
- Zeros of Function
- Numerical Integration (2)
- Plane Geometry (2)

### • Statistics

- Normal Distribution
- Random Numbers
- Combinations, Permutations, Factorials
- Moving Averages



### • Finance

- Compound Interest
- Annuities
- Days Between Dates

### • General Interest

- Hi/Lo Game
- Checking Account Control
- Deg/Min/Sec Arithmetic
- Conversions (2)
- Diagnostic

## Optional library modules available.

Prewritten programs, plus easy-to-follow manuals. Use them from the keyboard or make them part of your program.

- Applied Statistics • Math/Utilities • Real Estate/Investment
- Securities Analysis • Business Decisions • Electrical Engineering • Surveying • Aviation • Marine Navigation
- Farming • RPN Simulator • Leisure Library

## Magnetic cards. Record your own custom programs. Make them part of your library.

Magnetically recorded program can tie into programs in the solid-state library modules. And for those applications where a program is confidential, you can protect it so no other user can "look" at it. It takes only an extra keystroke.



# Specifications

**Display:** Bright 12-character LED display shows 10 digits plus sign in standard format. 8-digit mantissa, 2-digit exponent and 2 signs in scientific notation. Also will display in engineering notation. Plus, fixed or floating decimal point.

**Electronics:** Texas Instruments manufactured MOS/LSI integrated circuits and other solid state components.

**Power Source:** Rechargeable battery pack. Recharges fully in 4 hours with calculator off to provide approximately 2½ hours of portable operation with normal use. Operable while recharging. AC adapter/charger input 115V/60 Hz.

**Included:** *Solid-State Software™* Master Library Module. Personal Programming owner's manual. Master Program library manual. Solid-state software accessories kit containing: Program label cards. Quick reference guide. Library cards carry case. Extra magnetic program/data storage cards. AC adapter charger. Vinyl carry case.

**Size:** 6.43 x 3.24 x 1.44 inches  
(16.33 x 8.23 x 3.66 mm)

**Weight:** 10.74 ounces (304.5 grams)

## Limited Warranty

The TI Programmable 59 is covered by a one-year limited warranty against defects in materials and workmanship.

Due to the difficulty in photographing calculator readouts, displays represented here are simulated.

Texas Instruments reserves the right to make changes in materials and specifications without notice.

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