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# SCIENCE NEWS LETTER

®

THE WEEKLY SUMMARY OF CURRENT SCIENCE



Laboratory Weeds

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A SCIENCE SERVICE PUBLICATION



# BUILD 125 COMPUTERS AT HOME WITH GENIAC®

ONLY  
\$19<sup>95</sup>

With the 1958 model GENIAC®, the original electric brain construction kit including seven books and pamphlets, over 400 parts and component rack, and parts tray, and all materials for experimental computer lab plus DESIGN-O-Mat®.

## A COMPLETE COURSE IN COMPUTER FUNDAMENTALS

The GENIAC Kit by itself is the equivalent of a complete course in computer fundamentals, in use by thousands of colleges, schools and industrial training labs and private individuals. Includes everything necessary for building an astonishing variety of computers that reason, calculate, solve codes and puzzles, forecast the weather, compose music, etc. Included in every set are seven books described below, which introduce you step-by-step to the wonder and variety of computer fundamentals and the special problems involved in designing and building your own experimental computers—the way so many of our customers have.

## ANYONE CAN BUILD IT!

You can build any one of these 125 exciting electric brain machines in just a few hours by following the clear cut step-by-step directions given in these thrilling books. No soldering required . . . no wiring beyond your skill. But GENIAC is a genuine electric brain machine—not a toy. The only logic and reasoning machine kit in the world that not only adds and subtracts but presents the basic ideas of cybernetics, boolean algebra, symbolic logic automation, etc. So simple to construct that a twelve-year-old can build what will fascinate a Ph.D. In use by thousands of schools, colleges, etc., and with the special low circuitry you can build machines that compose music, forecast the weather, which have just recently been added.

## TEXT PREPARED BY MIT SPECIALIST

Dr. Claude Shannon, known to the readers of **Popular Electronics** for his invention of the electronic mouse, that runs a maze, learning as it goes, formerly a research mathematician for Bell Telephone Laboratories is now a research associate at MIT. His books include publications on Communication theory and the recent volume "Automat Studies" on the theory of robot construction. He has prepared a paper entitled "A Symbolic Analysis of Relay and Switching Circuits" which is available to purchasers of the GENIAC. Covering the basic theory necessary for advanced circuit design it vastly extends the range of our kit.

The complete design of the kit and the manual as well as the special book DESIGN-O-Mat® was created by Oliver Garfield, author of "Minds and Machines," editor of the "Gifted Child Magazine" and the "Review of Technical Publications."

**Oliver Garfield Co., Inc.**  
108 East 16th St., N. Y. 3, N. Y.

Dept. SL88B

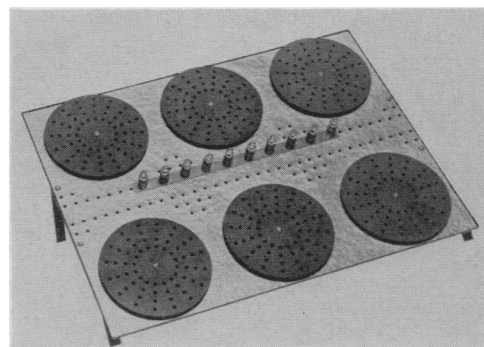
Please send me at once the GENIAC Electric Brain Construction Kit, 1958 model. I understand that it is guaranteed by you and may be returned in seven days for a full refund if I am not satisfied.

I have enclosed \$19.95 (plus 80¢ shipping in U. S., \$1.50 west of Miss., \$2.00 foreign), 3% New York City Sales Tax for N. Y. City Residents.

Send GENIAC C.O.D. I will pay postman the extra C.O.D. charge.

Name .....

Address .....



## OVER 20,000 SOLD

We are proud to announce that over 20,000 GENIACS are in use by satisfied customers—schools, colleges, industrial firms and private individuals—a tribute to the skill and design work which makes it America's leading scientific kit. People like yourself with a desire to inform themselves about the computer field know that GENIAC is the only method for learning that includes both materials and texts and is devoted exclusively to the problems faced in computer study.

You are safe in joining this group because you are fully protected by our guarantee, and have a complete question and answer service available at no cost beyond that of the kit itself. You share in the experience of 20,000 kit users which contributes to the success of the 1958 GENIAC—with DESIGN-O-Mat®, the exclusive product of Oliver Garfield Co., Inc., a Geniac is truly the most complete and unique kit of its kind in the world.

## COMMENTS BY CUSTOMERS

We know the best recommendation for GENIAC is what it has done for the people who bought it. The comments from our customers we like best are the ones that come in daily attached to new circuits that have been created by the owners of GENIACS. Recently one man wrote: "GENIAC has opened a new world of thinking to me." Another who designed the "Machine That Forecasts the Weather" commented:

*"Several months ago I purchased your GENIAC Kit and found it an excellent piece of equipment. I learned a lot about computers from the enclosed books and pamphlets and I am now designing a small relay computer which will include arithmetical and logical units . . . another of my pet projects in cybernetics is a weather forecaster. I find that your GENIAC Kit may be used in their construction. I enclose the circuits and their explanation."* Eugene Darling, Malden.

## KIT IS COMPLETE

The 1958 GENIAC comes complete with the following books and manuals and over 400 components.

- 1) A sixty-four-page book "Simple Electric Brains and How to Make Them."
- 2) Beginners Manual—which outlines for people with no previous experience how to create electric circuits.
- 3) "A Symbolic Analysis of Relay and Switching Circuits" by Dr. Claude Shannon provides the basis for new and exciting experimental work by the kit owner who has finished book No. 1.
- 4) DESIGN-O-Mat® introduces the user to over 50 new circuits that he can build with GENIAC and outlines the practical principle of circuit design.
- 5) GENIAC STUDY GUIDE equivalent to a complete course in computer fundamentals, this guides the user to more advanced literature.
- 6) A Machine to Compose Music shows in an actual circuit what other GENIAC owners have been able to do on their own in designing new devices.
- 7) A Machine to Forecast the Weather—again a new adventure in scientific thinking created by one of our users who was trained on his GENIAC Kit.

Plus all the components necessary for the building of over 125 machines and as many others as you can design yourself.

# Special Tool Bargains-Save Up to 50%

## AMAZING BLOCK & TACKLE

• **PORTABLE . . . weighs only 13 ozs., fits in pocket!**  
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**lifting up to 1000 lbs.!**



**Amazing Work Saver for**  
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Here's an unusual tool, even for us! It's the tiny Midget Babe Block and Tackle. It weighs only 13 oz., yet is so powerful it lifts up to 1000 lbs. easily! Because of its great strength, small size, complete portability—this block and tackle has many uses. In your car for emergencies, for home, factory, farm . . . for loading heavy articles. For sportsmen: loading, deer, boats, etc. For anyone who has to do heavy lifting! Fine engineered throughout, best grade aluminum, steel axles, pre-lubricated for life. Hoists have two lifting slings, at top and bottom, with heavy welded steel rings. Slings can be doubled for extra strength. Complete with 70 ft. nylon cord, 5 to 1 ratio—1000 lb. test. **\$9.95** Carrying bag. Instructions. . . . . ppd.

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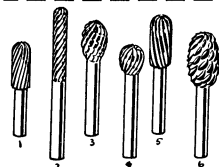
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Here's a new fast-cutting professional power hand saw that speeds 1001 projects in the shop on the job and in the home. Handles as easily as dad's old-fashioned hand saw. Saves time and energy—saws twice as fast as ordinary saws yet never tires the user. Cuts straight and true—angles to 45 degrees—curves, circles, scrolls. Use for long panel cuts, ripping, cross cutting, even 2 x 4's! Starts its own holes—blows line of cut clear of sawdust for easy visibility. Powerful 3.1 amp. motor easily cuts thru 2" wood, composition or 1/8" steel. Gives 3400 strokes per minute with 1/2" stroke length. Troublefree Oilite bearings. Features Universa series wound motor; AC or DC, 115V; positive on-off UL approved switch; 6 ft. 2-conductor U.L. approved lead cord. Measures 6 3/4" x 6 1/2", weighs but 4 lbs. Complete with wood cutting and metal cutting blades and wrench.



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These high speed rotary files will quickly and cleanly do every job you can imagine—no matter how tough the metal or other materials being used. Six different shapes, cuts and sizes from spindle to turret to do a wide variety of work. Full 1/4" shanks. Lengths vary from 2 1/4" to 3". These rotary files would normally cost you \$15 an more for the set, but because they are government surplus you can now select any one for only \$1.25 (order by number) or order all six for only \$6.50 ppd.

**\$1.25** ea. ppd.

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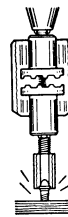
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These powerful permanently magnetized magnets—each the size of a jelly bean—lifts over 1/2 pound! Sewn into po. holders, towels or shower curtains—makes them securely cling to steel. Holds items on dashboard, metal files, demonstration or bulleting boards. Recovers items from hard-to-reach places. Pulls through glass, wood, paper, leather, plastic—anything but iron. All 10 rustproof magnets—**\$1.00** ppd.

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