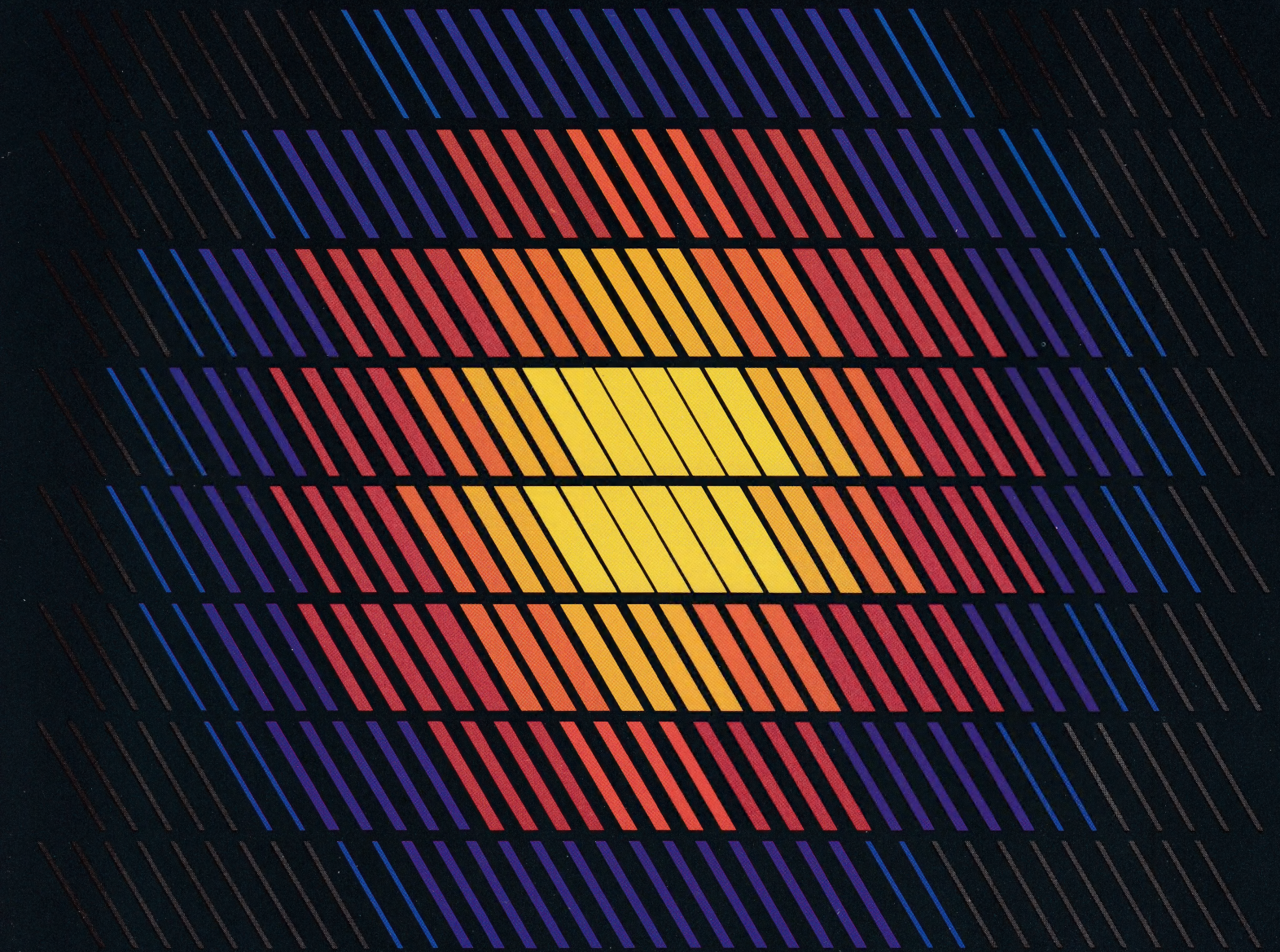
VideoBrain™

CONSUMER'S GUIDE:

The Home Computer for Money Management, Education and Entertainment



VideoBrain gives you computer power

We've all become aware of the power of the computer. It's all around us. Large corporations utilize the computer's power to improve the efficiency of their operations to do things that were impossible just a few years ago. But now for the first time you and your family can join the computer revolution too. Because VideoBrain gives you computer power, bringing you into a new world of efficiency and capability. Equipped with VideoBrain you are on an equal footing with the big guys.

What is a "home" computer?

A home computer must

1. Be powerful enough to do *real* computer work for the home
2. Be affordable
3. Be easy to use

VideoBrain is the *first* computer designed exclusively for the home. It has the same kind of power as a million-dollar industrial computer. Yet through the miracle of microelectronics, it costs less than an ordinary color TV. And its innovative design makes VideoBrain easy for every member of your family to use.

What will VideoBrain do for your family?

VideoBrain will manage your home financial affairs, educate your children—even entertain you. It does this with software programs (more than any other home computer) stored on easy-to-use, plug-in cartridges.

In the area of home management you'll find a program that provides you with the computational features of the most sophisticated financial calculators (VB-81 Financier™), but with graphics display. A program that allows you to record, analyze and store financial data (VB-1000 Money Manager™). A program for general record management (VB-1200 Information Manager). A program that lets you write your own programs using an advanced language called STRUCTURE BASIC™ (VB-59 the Programmable™). Plus home economic programs and time-share programs for communicating by telephone with other computers.

VideoBrain's educational programs make learning more exciting with interaction and immediate feedback. Most feature several levels of difficulty to encourage children *and* challenge adults. Some teach specific subjects like vocabulary (Wordwise™ 1), math (Math Tutor), elementary economics (Lemonade Stand). Others build abilities in music and art and offer an electronic playing field for creativity.

And VideoBrain's entertainment programs show you how much fun computer power can be with sharp colors, exciting sound effects, complex animation, and games that think. The computer will beat you at Checkers. Its version of the ancient oriental game of Go (Vice Versa™) goes far beyond what can be done in the board version. You can indulge yourself in Tennis and Pinball like never before. Try 384 varieties of man-to-man combat with Gladiator. Because these games are being run on a real computer, you can even program for fun with Music Programmer and Programmable Football.

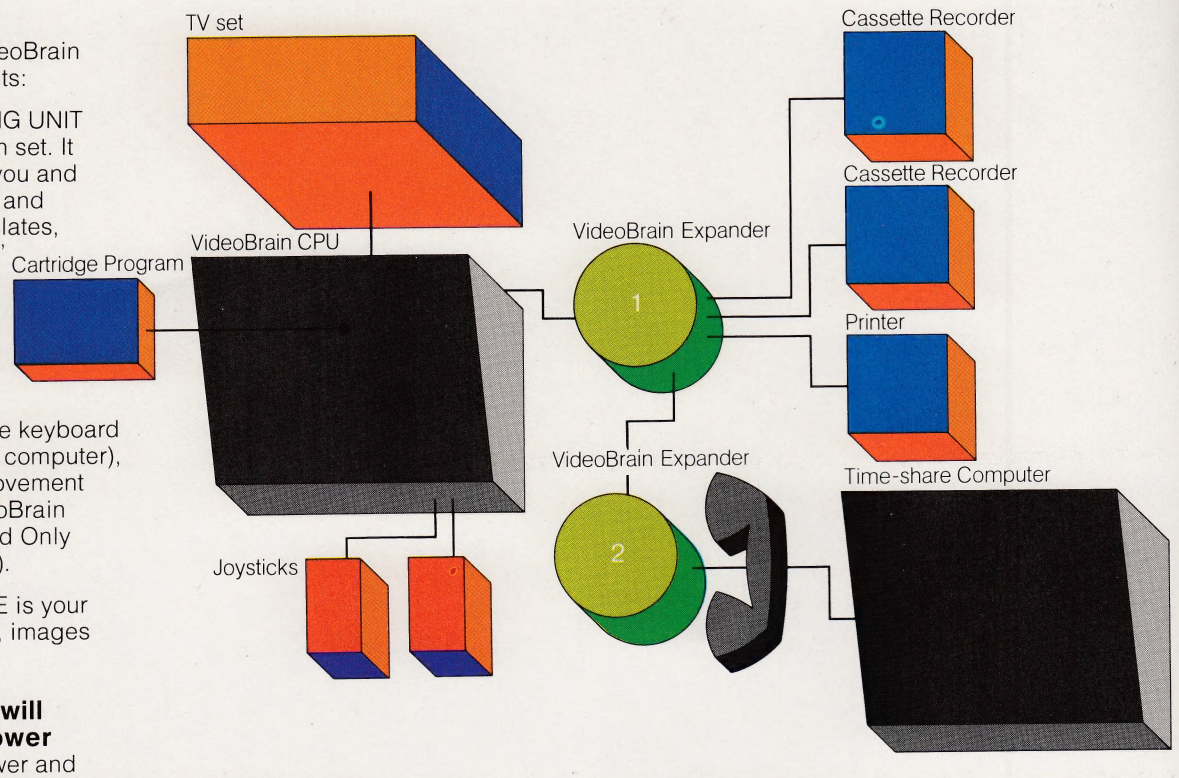
How VideoBrain works

Just like the big computers, VideoBrain contains these essential elements:

THE CENTRAL PROCESSING UNIT (CPU) attaches to your television set. It takes "input" (information from you and the various program cartridges) and "processes" it (organizes, calculates, records/displays) on an "output" device. It has a working memory called RAM (Random Access Memory) which the computer can "update" (revise) while the programs are in operation.

THE INPUT DEVICES are the keyboard (used to type directions into the computer), the joysticks (used to control movement on the TV screen), and the VideoBrain programs (stored in ROM—Read Only Memory—on plug-in cartridges).

THE MAIN OUTPUT DEVICE is your color TV—it displays text, color, images and sound.



VideoBrain expanders will increase your computer power

You can easily increase the power and versatility of your VideoBrain computer with these expansion units:

EXPANDER 1 used with ordinary audio cassette recorders gives you mass memory capability so that you can permanently store the programs you write or the data you use.

EXPANDER 2 connects VideoBrain to timesharing networks through your telephone to give you communications capability—allowing you to use VideoBrain as a home computer terminal.

A PRINTER used with Expanders 1 or 2 will turn the information displayed on your TV screen into hard copy, printed on paper.

FUTURE EXPANSION UNITS will include special keyboards, voice response units, and home controllers.

Five systems to get you started easily

The VideoBrain computer, software cartridges, and expanders have been grouped into five convenient systems, ranging from basic to advanced, for five specific kinds of use. Each system can of course be expanded into a more sophisticated system by adding new software and expansion capability.

Study the chart and choose the system that's right for your needs.

The Five Systems

System 100
VB-101 Computer
VB-81 Financier™

THE BASIC
provides users with financial and general calculation capability at the lowest entry cost into computer systems.

System 200
VB-101 Computer
VB-81 Financier™
Math Tutor
Music Teacher 1
Wordwise™ 1
Checkers

THE FAMILY
gives a family a balanced mix of capabilities in the areas of Home Management, Education, and Entertainment. It manages family finances, tutors the kids and challenges everyone to checkers. It's the perfect entry level machine for the family that wants to be part of the computer revolution.

System 300
VB-101 Computer
VB-81 Financier™
VB-1000 Money Manager™
Expander 1

THE MANAGER
is a complete financial manager for the home. It will make complex financial and general calculations, manage cash accounts, and it will store and retrieve information from an audio tape mass memory. It is the ideal system for those who want to use a computer to manage their monetary affairs.

System 400
VB-101 Computer
VB-59 The Programmable™
VB-81 Financier™
VB-1000 Money Manager™
Expander 1

THE SUPER MANAGER
contains all the features of System 300, and in addition gives sophisticated users the ability to write their own programs with our powerful VB-59 array manipulation language. In terms of user computer power, this system outperforms machines selling for twice the price.

System 500
VB-101 Computer
VB-81 Financier™
VB-1000 Money Manager™
Timeshare
Expander 1
Expander 2

THE PROFESSIONAL
provides the ultimate system for those who need to use the resources of larger computers at home. It features all the financial management and analysis power of System 300, plus telecommunications capability. System 500 is complete and ready to hook up via telephone to any outside computer the user needs to access.

Some things you should know about computer programs and programming languages

A computer can't do anything unless it has been programmed. A program is a set of step-by-step instructions telling it exactly what to do. Most useful programs are very complex and require many thousands of instructions.

Program instructions are written in a variety of forms, called languages. These languages fall into three basic groups:

- MACHINE AND ASSEMBLY LANGUAGES were the first languages developed for computers and are still used for several types of work. They are the most difficult to use because they are oriented to the computer itself, rather than to the user.

- HIGH-LEVEL GENERAL-PURPOSE LANGUAGES such as FORTRAN, BASIC, and COBOL are more modern and less difficult to use because their language structure is closer to ordinary language. Professional programmers use these languages very effectively.

- APPLICATION LANGUAGES are considerably easier to use because they require relatively few instructions to create a powerful effect. This type of language is very practical for non-computer experts, and for that reason VideoBrain makes a major use of them in its programmable cartridges.

Programming vs. pre-programmed cartridges

VideoBrain provides you with both a growing library of pre-programmed cartridges (you don't have to do any programming) and a selection of application language cartridges (you can write your own powerful programs).

To get full use out of your computer you'll probably want to take advantage of both methods: there's no better way to learn about what makes a computer tick than by writing your own programs and seeing them work. And VideoBrain's extensive program library gives you a wider variety of professionally designed programs than you could, or would want to, write.

VideoBrain's library of cartridge programs

New programs are constantly being designed, written, and produced for VideoBrain. Here is a list of programs you will be able to purchase this year:

Money Management Series

VB-59 The Programmable™
Provides the user with a computational language—STRUCTURE BASIC™—that's powerful and easy to use. It features array manipulation, "structured" control words, and simplified Input/Output control.

VB-81 Financier™
A fully prompting program for personal financial use and general household calculations with color graphics display.

VB-1000 Money Manager™
A personal "cash register" that records and analyzes your expenditures to help you fight back against inflation and high taxes.

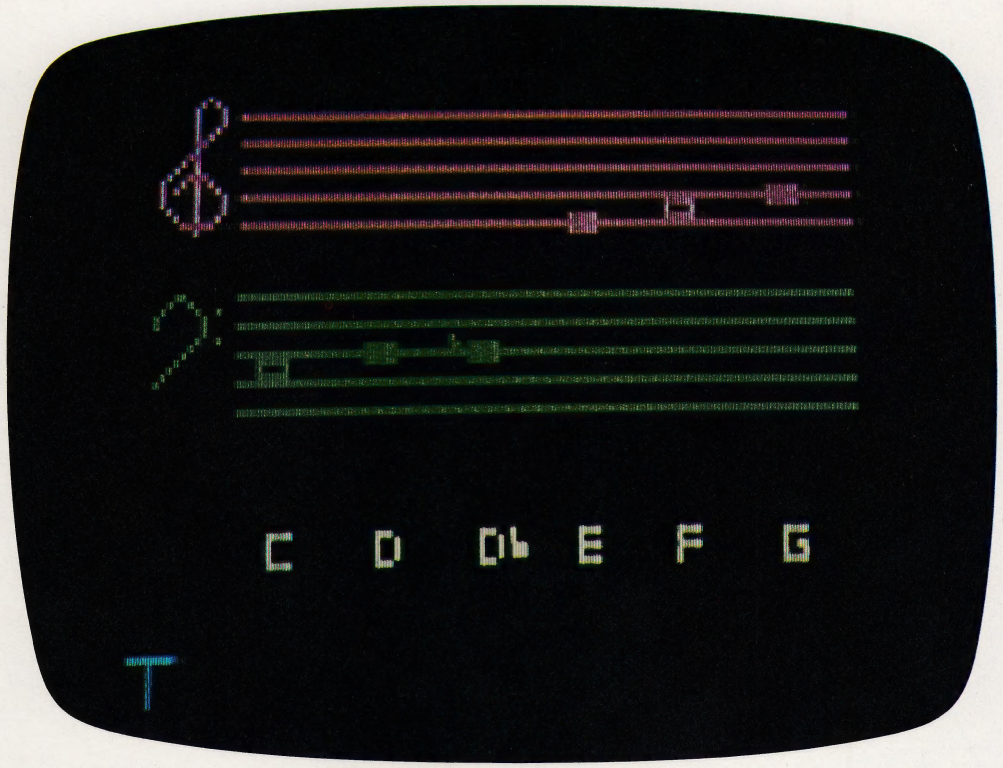
VB-1200 Information Manager
Allows you to define data banks and keep track of information such as credit accounts, appliance warranties, medical records, magazine subscriptions, etc.

Communications Series

Timeshare CM01
Changes VideoBrain into a timeshare terminal—so that you can "access" the data banks and computer power of a large timeshare system.

Education Series

Music Teacher 1 ED01
Turns the computer into a musical instrument (much like an electric organ) to teach the basics of reading music.



Math Tutor 1 ED02
Personalized instruction in addition, subtraction, multiplication and division. (The first electronic teaching aid that allows students to work out all the steps in math problems right on their TV screens.)

Wordwise™ 1 ED03
An exciting program that builds vocabulary and spelling skills by challenging players to find words in blocks of random letters.

Wordwise™ 2 ED04
Brings touch typing into the computer age with three exercises designed to teach beginning typists. Includes "Cypher," a fascinating *new* word game.

VideoArtist™ ED05
Create your own original designs in 16 electronic colors. Quadruple your designs into a kaleidoscope, select some special effects and then put your entire design into motion.

Lemonade Stand
A Business Simulation **ED06**

Uses exciting sounds and graphics to teach everyone the essentials of economics and business management. A must for young tycoons.

Musicianship 1 ED07
Designed by a Stanford University professor of music. It is the equivalent of a major portion of a college level music course . . . yet interactive enough to allow very young students to learn music theory.

Number Cross™ ED08
An original competitive exercise designed to teach young children basic math skills. Advanced variations make it challenging for older children and adults.

Historical Simulation™
France in the Old Regime **ED09**

Designed by a history professor to teach history in a realistic new way. Students strive for wealth and status while absorbing the economics, events and richness of France in the early 1700s.

Entertainment Series

Gladiator EN01
A total of 384 action-packed games for Ancient Gladiators, Modern Gladiators, and Future Gladiators.

Pinball EN02
Programmed by pinball fanatics to provide players with a challenging assortment of game possibilities.

Tennis EN03
Like the real thing—with realistic players, spectators and an animated ballboy.

Checkers EN04
Written by Arthur Samuel, a Professor Emeritus at Stanford University who is world-renowned for his experiments with artificial intelligence. It provides players with four computerized opponents of varying skills.

Blackjack EN05
One or two players try to beat the dealer in a real Nevada-style game.

Vice Versa™ EN06
Another Dr. Samuel creation—this board game provides the player with a choice of computerized opponents for an update of the oriental game "Go." You can even get the computer to act as referee and scorekeeper while you play.

Music Programmer EN08
Provides the user with an application language especially designed to program musical experiments. Capabilities include: first and second endings, subroutines, speed and volume changes, and even playing the song backwards.

Programmable Football EN09
A do-it-yourself cartridge for designing offensive and defensive formations and plays using the power of the computer and an easy football programming language. You can even have practice sessions before competing in a head-to-head game.

VideoBrain:
the family computer for today and for the future.

VideoBrain is designed from the beginning to never become obsolete. As the VideoBrain cartridge library grows, you'll find dozens of new applications for your computer. And, for even more usefulness and versatility, you can use either of VideoBrain's expanders to attach cassette recorders, printers and other electronic devices to your basic system. VideoBrain, the family computer, will continually grow and evolve to bring the newest computer applications into your home.

VideoBrain:
built to last.

VideoBrain is a durable, solid-state product assembled according to strict quality-control guidelines and thoroughly tested for years of faultless service. All electronic circuitry is guaranteed for 12 months from date of purchase. The console and expander cases, keyboard, joysticks, program cartridges, and antenna switchbox are guaranteed for 90 days. VideoBrain Computer Company will repair without charge any defects occurring during these warranty periods.

If a problem occurs after the warranty expires, VideoBrain Computer Company will provide complete service and parts at reasonable cost. All maintenance is performed at the manufacturing facility in Sunnyvale, California, using the latest computerized diagnostic equipment. You're assured of fast, expert service.

VideoBrain Computer Company is dedicated to providing the very best family computer products on the market. Located in the leading technological center of the world, the San Francisco Peninsula, VideoBrain Computer Company will continue to provide you with the latest advancements in computer technology.

VideoBrain:
the complete computer.

Your VideoBrain console includes:
Keyboard console (14″x11½″x5″; weight: 10 lbs.)
Two plug-in joysticks
AC power adaptor
TV hookup cord and antenna switchbox
Introductory cartridge program packs
Owner's manual

VideoBrain accessories:
Expander 1
Expander 2

Additional joysticks (up to 4 can be used at once in some programs)

VideoBrain:
technical specifications.

CPU: F-8 Microprocessor, 8 bit
Memory: 1K Byte RAM/4K Byte ROM
Inputs: 36-key keyboard (with 71 distinguishable input symbols); 2 x/y joysticks (capability of up to 4 x/y analog controls) with hit buttons; cartridge programs (up to 12K bytes of memory each).
Outputs: Standard TV signal (RF) including 16 colors and sound, receivable on either channel 3 or 4 (user option).
Expansion socket: Includes lines for data transmission, reset, interrupts, bidirectional sound, and power for add-on products.
Power: 120 VAC, 10 watts typical power consumption.
FCC and UL approved.

Expander 1 specifications:
CPU: 3870, single chip Microprocessor
Memory: 2K ROM
Inputs/Outputs: Cable with plug to VideoBrain expansion socket; two cables with plugs to control and exchange data with two standard cassette tape recorder sockets for communication with "RS232" standard printers and modems.

Expander 2 specifications:
An acoustic coupler for connection to your household telephone.

Manufacturer reserves the right to change product and program specifications without notice.

VideoBrain™

©1978 VideoBrain Computer Company
150 South Wolfe Road
Sunnyvale
California 94086

Printed in USA 578-100500