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FEATURES

JANUARY 1981

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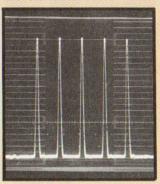
Happy Birthday, Videotapel This new year marks the 25th anniversary of videotape. Bob Gerson traces the history of this still young and growing technology......54

Editing Your Own Tapes—How To Do It Better at

Tape Sources You May Have Missed If you think movies, TV shows and concerts make up the only interesting material on videocassettes and discs, you may be missing some

CONTINUING SERIES

Critic's Choice: The Top Ten Sports Tapes season, sports fans can watch a lot more than the Bowl games—thanks to a growing variety of sports programs on

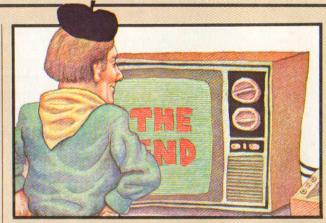


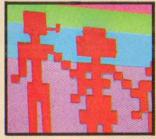


EQUIPMENT REVIEWS

How We Test VCRs The first in a series of clip-and-save reference articles by Len Feldman explaining how we evaluate home-video equipment. This month: Videocassette Recorder Tests......31 Test Reports Technical Editor Len Feldman and the CBS

Technology Center test and report in depth on: Sony's first two-piece projection TV set . . . Magnavox's latest programmable VCR . . . a companion videocamera from Magnavox . . . RCA's newest, top-of-the-line VCR 34







PROGRAM REVIEWS

In Brief Thumbnails of other tape and disc releases......74

DEPERTMENTS

Viewpoints From publisher Richard Ekstract	7
Newsbreaks Art Levis cues you on the latest in video	8
Video Views Bob Angus on Japan's component video	14
Freeze Frames David Hajdu's potpourri of video news	16
Looking Ahead Bob Gerson focuses on two-way TV	21
Interviews Roy Hemming interviews Stan Hametz	22
Q&A Our experts answer your questions	24
New Products This month's hottest hardware	28
Coming on TV Worth catching on broadcast and cable	79
Humor More of the wholly fictitious history of television	104

Video and booze making them mix



Eat Your Heart Out, Joe Franklin!

Video Video Review might be a better name for it, but VR contributors Mark Trost and Ed Hulse are spinning off their video expertise to produce Movie Madness—the first home-video-oriented cable TV show.

Trost coproduces the hourly program, which plays on New York's Manhattan Cable Channel J at midnight every Wednesday. With a different movie theme each week, host Hulse discusses video and other movie news, interviews guests, plays rare tapes, displays movie memorabilia and answers phone calls before a studio backdrop of movie-lobby posters and stills.

"The great majority of our viewers are video fans who want information about filling out their tape collections or insight into the goings-on behind the scenes in videoland," says Hulse.

So far, the line-up of Movie Madness guests includes writers Alan Barber, Richard Bann, Jerry Beck, movie historians (and *VR* contributors) Leonard Maltin and William K. Everson, and Doug Mendini, an expert on Marilyn Monroe.

Videocassettes of the program are available as well, from MGT Media Services, 234 E. 32St., New York, NY 10016. All interested parties must be movie maniacs. □



It's Gotta Be Rock 'n' Roll Music If You Wanna Tape with Me

Rock 'n' roll cable is here, if not to stay, at least to play an encore

When the cable show

Video Concert Hall took its last bow in September 1980, rumors of bankruptcy, sloppy bookkeeping and union skirmishes seemed to have scratched rock video fans' main programming source in the middle of its groove. But VCH is back, like Myra Breckenridge, with a new name, a new face and a lot more curves.

The new name is Video Concert Network. (Is every new specialized cable show system really a network?) The new face is an advertising-sponsored format, a sixday schedule and "local" time slots (usually after non-affiliates go off the air). And the curves are "a few surprises" that VCN promises in its new programming.

A pleasant enough surprise would be a programming run this time that last longer than a Ramones tune.

Wait'll Jane Fonda Hears About This

Like cats, dogs and goldfish, some home-video products are passive by themselves, but can lash out at each other destructively when they're all together in the same place.

The real rough-house "Tom and Jerry"s of home video are personal computers and other equipment with microprocessors, which can ruin broadcast-TV or video picture quality with ultra-low levels of radiation. They could use a watchdog organization to sniff out excess amounts of radiation in microprocessors, and the FCC has made just such a group its new pet project.

Effective January 1, 1981, the FCC has set strict guidelines monitoring the level of radiation generated by all products with microprocessors. They're not a health hazard—again, they're not a health hazard—but miniscule levels of radiation comparable to



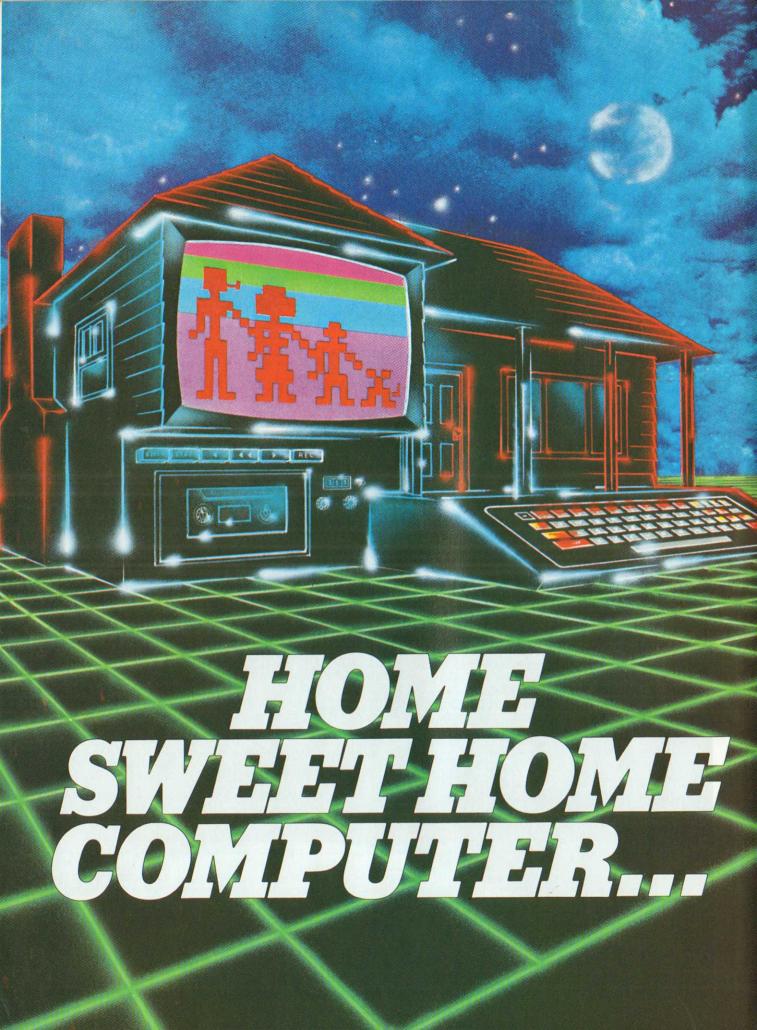
those emitted outdoors naturally can play havoc with TV sets.

Household products with microprocessors include many new VCRs, TV sets, audio components, alarm clocks and, of course, calculators and other "thinking" devices. If any such products seem to be affecting your TV picture, write to the manufacturer. And contact the FCC if the company gives you any static. □

Bob Marley: "I Shot the Movie"

Throughout his ultimately phenomenal musical career, Bob Marley has always gone through the back door and ended up out front. Now his first acting venture





he salesman said my personal computer would change my life. It is a compact machine, slightly larger than an attache case. It weighs only a few pounds more than a toaster oven, and comprises a typewriter keyboard, electronic circuitry and plug-in jacks on the back.

For consumers with an abiding curiosity about the uses of modern technology, perhaps no other piece of home equipment promises to initiate them so thoroughly into the mystique of data processing and the impact it is increasingly having on the way people live.

market today, only the personal computer performs more than a single function. Refrigerators only refrigerate, and dishwashers wash dishes. Automobiles, for all the sense of freedom they convey upon their owners, still provide nothing more than transportation. Even television, with its vast potential as a communications

Of all the consumer products on the

formation and entertainment.

But the personal computer is different. By itself it is nothing. But hooked into a television set, it takes on a life of its own, ed-

medium, today offers only in-

ucating and entertaining, controlling appliances in the home, keeping track of financial records and sending and retrieving information over the telephone lines. It can also, of course, compute.

For the past five years or so, Americans have been spending from several hundred dollars for a primitive computing kit to thousands of dollars for a system that in many ways approximates computers used by the professional. In all, it is estimated that some 2,000,000 of these hobby computers have been sold, with a value totalling well over \$500 million. Today more and more people appear ready to take the next step and meet the computer face to face. For them, and for me, the question is what you can do with one, and why anyone would spend the estimated \$500 to \$2,000 to own one.

Where to Start

Clearly the appeal of the personal computer has grown and broadened out—so much so that now I want to own one. Beyond my interest as a reporter of technology news, I am impelled as much by the desire to come to grips with this newest of consumer appliances as by the wish to benefit further from its use.

That said, what about learning the rudimentary language of computing—of software, floppy discs and high-resolution graphics? Even more basic is the question of where and how to go about buying one.

What you don't do is call I.B.M., Univac or Honey-

Reprinted in a condensed form from a series in the New York Times. Copyright 1980 by The New York Times Company. Reprinted by permission. well. Professional computer companies such as these do not make these smallest of computers. Indeed, their lowest priced systems sell for upward of \$10,000 and require a specialist's expertise to operate.

Instead, a new breed of retail store has sprung up in recent years in suburban shopping malls and in most large and medium-sized cities to serve this specialized personal computer market. These include such national chains as the Byte Shops and Computerland stores, as well as a host of independent personal computer retail stores with names like the Digital Deli, the Computer Factory, MicroAge and Computer Master, all of which stock a variety of brands and can be found in the

Yellow Pages of the telephone directory. Then, too, Radio Shack markets its popular line of computers out of both its electronics and

specialty computer stores.

The easiest thing, of course, is to ask someone who already owns one, since buying a computer is only half the battle. Equally important

is finding a dealer with a reputation for good service, one who will also offer assistance along the way as you seek to unravel the mysteries of using a personal computer.

of using a personal computer.

Many manufacturers support

what are known as "user groups"—informal clubs of personal computer owners. Most dealers should be willing to put you in touch with one of these groups before you buy, which is how I came to be standing outside a computer store in Manhattan's Rockefeller Center on a recent afternoon.

Even if you have been directed to a popular computer store, as I was, the decision as to which model to buy, of the literally scores on the market today, can be as perplexing as buying a new car—and sometimes as expensive. While ultimately, of course, these things come down to a matter of personal preference—what suits your needs and conforms to your budget—you will want to know what the different manufacturers' systems cost, their capabilities and, more important, whether the investment in time and money will be well spent.

Unfortunately, as anyone who has ever bought a computer knows, the computer salesman is often little help. Typically, the people who sell these machines fall into two categories: those who know the product but seem more interested in showing their command of the field than in making a sale, and those who seem to know little or nothing at all about computers.

Speaking the 'Language'

The fact is that computer stores can be unnervingly like many stereo specialty shops. If you do not speak the language, you cannot buy the product. Even experienced computer users complain about the confusing stream of buzz words, or "computerese," that passes for information at many of these outlets. To avoid being totally vanguished the first time you cross

the threshold of your local computer store, it is advisable to arm yourself with the basics of computer terminology, beginning with the difference between hardware and software.

Hardware refers to the physical equipment that makes up a computer system, the central processing unit, or C.P.U., for example, memory devices and the like. Software is the programmed instruction that tells a computer what to do-in effect, the tool that turns your computer into a useful appliance, allowing you to communicate with it in English. There are programs for everything, from vector analysis to polishing your backgammon skills, and they are contained on audiotape cassettes, plug-in cartridges or record-like plastic discs, called "floppies."

Three Price Ranges

To begin computing, you will need what is known as "a minimum starter set"—a central processor, a typewriter keyboard for communicating with the computer, and a television display screen that allows the computer to communicate in return.

In addition, you will need an external memory device of some kind, either a cassette recorder or floppy-disc drive to play, or "load," the software programs into the computer's memory. The programs

range in price from \$5 for a simple video game to \$150 for a sophisticated business analysis application.

A word of explanation about memory. It comes in two forms, the internal memory circuits that reside within the computer, allowing it to retain information while in use, and external memory in the form of tape cassettes and floppy discs. These not only contain programming but are also used for permanent storage of information generated by the computer.

Personal computers are available in three price ranges: \$500 systems that are the next step up from television-based video games; systems that sell for around \$1,200 to \$1,500, and, for the truly serious user, units that begin at around \$3,500 and run up to \$10,000 or more. These prices represent nothing more than your initial cost. Once hooked, you may find yourself doubling and even tripling your initial investment as you increase the sophistication of your

Most personal computer owners find it useful to make a physical copy of what is on the display screen. For that you will need an optional printer, costing anywhere from \$250 for one that prints on an addingmachine-like tape to \$3,000 for letter-quality copies.

And for those wanting to retrieve information, say up-to-the-minute stock market quotations or United

COMPUTERS: A SAMPLING (0)BASIC **OPTIONS** COMPANY MODEL COMPONENTS APPLE COMPUTER Apple II Keyboard, color First disc drive with 146K of memory and interface, capability, 16K of RAM \$600; additional drive, \$500; printer, \$600; \$1,195 telephone modem, \$390 APF Keyboard, built-in Disc drives with 72K of memory, \$550 each; Imagination cassette deck, 9K expansion device required for disc drive, \$200; Machine IM-1 \$600 of RAM telephone modem \$200 Disc drive with 92K of memory, \$700, or disc drive ATARI Keyboard, 16K of RAM Atari 800 with 163K, \$1,500; printer, \$1,000; telephone \$1,080 modem, \$200; printer and modem require interface, \$200 Disc drive with 343K of memory, \$1,295, or with COMMODORE Keyboard, black and white PET 950K, \$1,695; printer, \$695; telephone \$795 monitor, 8K of RAM modem, \$395 HEATH First disc drive with 102K of memory, \$595; Heathkit H89 Keyboard, black and white \$1 695 monitor, 16K of RAM, disc additional drive, \$325; printer, \$700; telephone (unassembled) drive with 100K of memory modem, \$275 OHIO SCIENTIFIC Keyboard, 8K of RAM Disc drive with 90K of memory, \$450 each; black Challenger 1P and white monitor, \$129; color monitor, \$475; Series II telephone modem, \$275 \$479 RADIO SHACK Keyboard with built-in None **TRS 80** Level I CPU, separate black \$499 and white video monitor, 4K of RAM First disc drive with 90K of memory and interface, Level II All of the above, but with \$990; additional drives, \$500; printer, \$1,000; \$849 16K of RAM; for \$149, Level I can be upgraded to telephone modem, \$300 Level II TI 99/4 First disc drive with 90K of memory and interface, TEXAS Keyboard, color \$795; additional drives, \$495; telephone modem, capability, 16K of RAM \$950 INSTRUMENTS \$450; color TV monitor, \$450; home TV interface, \$75 Prices subject to change

Sometimes it is not immediately apparent whether a problem is caused by you or the computer. Many of my problems stemmed from what users call "the misery of cassettes."

Press International news reports from a data bank, a telephone modem will cost around \$200.

Some brands, notably Radio Shack's TRS 80 and Commodore International's Pet model, offer a central processor, keyboard and display screen combined into a single unit. Others, the Apple II for example, come with only a keyboard and plug-in jacks at the back. In this case, it will be necessary to purchase separately either a television monitor, or, if you do not mind tying up the family TV set, an interface device, known as an RF—or radio frequency—modulator, that permits you to use your computer with your home set.

While an RF modulator costs only \$40, monitors that have none of the signal decoding circuitry found in a television receiver are said to offer a sharper picture. Some users therefore recommend spending the extra

\$200 or more that a monitor costs.

Starter sets come equipped with up to 16,000 characters or "16K bytes" of memory already on board. You can, however, with the addition of plug-in circuit chips increase the internal storage capacity of your machine to 48,000 characters or more, and many users say it is money well spent. "You always seem to run out of memory no matter how much you have," said one.

Then, too, some systems perform in color—not essential, but fun for graphics and video games—while others come only with black and white.

More important, perhaps, most computers in a given price range offer essentially the same hardware performance, and are differentiated, instead, by the amount of software that can be used with them. Unless you are prepared to invest literally hundreds of hours in learning how to "write" your own programs, you should investigate what kind of software is available for the model you are choosing.

Where to Set It Up

Keep in mind that the degree of sophistication of your computer system is virtually always a function of how much it costs. The \$500 computer, to many users, is little more than an ingenious toy, good for playing video games, occupying the kids with educational exercises and performing the most rudimentary applications in the home, say balancing a checkbook, storing telephone numbers and other projects that quickly take on a make-work character. On the other hand, if you are serious about computing, you may quickly become bored with these less expensive machines, and might be better off starting immediately at the next tier.

For my part, I thought I'd try an \$1,190 Apple II, with the minimum 16K of memory, a cassette recorder, and an RF modulator to hook it into my six-year-old color television set.

A word on deciding where to set up a computer at

home. Although it is possible to make an inventory of everything from your record collection to your favorite recipes on the computer, neither the kitchen nor the living room is the best place for one of these machines. Nor is any room where there are likely to be distractions. Computers—at least in the beginning—require full concentration. So pick an area with lots of space and the least likelihood of disruptions.

Hooking up my computer was relatively easy, taking no more than 20 minutes and a minimum of mechanical aptitude. But getting it to work with my home tele-

vision set was another matter.

I had elected to save some \$200 by not buying a separate television monitor to use as a display screen with my system. Instead, I purchased a \$40 device known as an RF modulator that permits my computer to work with my home receiver. Now, I discovered, my aging but still serviceable television set, while perfectly adequate for viewing television programs, is apparently not up to the demands of displaying the computer-generated graphics, characters and symbols. When given an instruction, my computer emits the characteristic beep that tells me it has understood the message, but the screen, by contrast, goes from blank to an unreadable melange of blurry images.

Placing the Blame

To the uninitiated, a problem with a personal computer can be particularly frustrating since it is not immediately apparent whether the problem is you or the computer. After numerous adjustments to my set, telephone calls to friends who own these machines, and finally a visit to the computer store, where the modulator was tested on another set, it became glaringly clear that it was my receiver, and not the modulator, that was the offending member.

Since a color monitor, which cannot pull in over-the-air televised signals, costs nearly as much as a television receiver, which can, I decided to buy another receiver. A week—and \$500—later I was ready to begin again, this time with "Technicolor visions" of all the splashy graphics, complicated displays and animated pictures my computer was going to create on my set.

Instead, what I got was "ERR," beep, "INSUF-FICIENT MEMORY IN 172," beep and "ILLEGAL QUANTITY IN 90, PRESS ANY KEY TO STOP," beep. This is a computer's way of complaining about the material being loaded into it.

In some instances it was the program's fault, in others, my own. In large measure, however, many of my problems stemmed from a phenomenon that computer users refer to as "the misery of cassettes."

Loading a program from a \$40 cassette recorder, as opposed to a \$600 disc drive, is a painstaking and, at best, inexact process, consuming half a minute or more. Although the instructions in the manual for loading cassette-based software are simple enough—rewind the tape, start it playing, type "LOAD" on the keyboard, and then depress the "RETURN" key—some programs do not go in smoothly.

For one thing, the cassette recorder must be set at just the right volume level for the computer to pick up, or "read," the programmed instruction on the tape—ac-

Continued on page 97

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improvise here and there, until finally you are creating programs of your own.

A Few Warnings

A word of warning: A simple but well-crafted program—one for example, that fills the screen with rapidly changing color patterns, or adds the "bounce" sound to a computer-generated ball-may involve hours of work at first. But in time, it may become like child's play.

Another warning: Don't expect others to be overwhelmed by a virtuoso computer performance. Like a baby's first halting steps, programming triumphs are of interest only to the parent.

Creativity at Work

The first program I was able to create without prompting from the manual involved instructing the computer to draw an endless series of random lines of varying lengths and colors across the screen. That in turn was followed by programs that generated intricate moire patterns in which colors continuously alternated, a bouncing ball that emitted a different sound each time it rebounded off the walls of the display screen, and finally a program that transformed the display screen into a sketch pad, in which the computer's game paddles-which come with the computer and control the action on the screen-could be used to draw lines. In each case my friends were not terribly impressed.

Useful or Not?

Some might say that what I have been doing is devising a series of ingenious but rather useless computer tricks, and that the serious business of programming lies beyond these simple skills. To a degree that is correct. But cleverness aside, these elementary programs, and the knowledge that underlies them, is part of the process of understanding how the computer "thinks," and that is the central ingredient needed by anyone seeking to take the next step toward turning the computer into a useful tool.

Besides, there are still three programming manuals for me to conquer.

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