

Tapes that Swing

JULY 1983
\$1.95
£1.70
DELL 04834

Video

Hot Tips for
Summer Taping

The #1 Magazine of Home Video

Component TV: Mix 'n' Match Mess?
Power to the Portables: Batteries Evaluated
Mickey Mouse Cable: Disney Arrives

BERGER-BRAITHWAITE VIDEOTESTS

RCA Convertible VCR

Showtime Camera Color Processor

Sony Color Camera



**Camera
Crazy!**



Contents

July 1983

Volume VII, Number 4



ABOUT THE COVER
Hot on the heels of the portable-VCR extravaganza in our June issue, the July VIDEO tells you everything you've ever wanted to know about cameras (but were afraid to ask)—not to mention batteries, tripods, and summer taping. Cover photo by Les Morsillo.

56

Component TV: Mix 'n' Match Mess?

by Marc Wielage

Unfortunately, quite a few component systems do not go together like love and marriage.

58

All that Jazz

by Gary Giddins

A critical guide to what's audiovisually collectible for fans of American jazz.

62

Phil Silvers: From Burlesque to Bilko

by Gary Kaskel

The showbiz odyssey of 'Sgt. Ernie Bilko' took him from the 'hoodlum clubs' of Brooklyn to network TV.

64

Camera Crazy

by Murray Slovick

Our special issue on the joys of roll-your-own video begins with a close-up look at cameras.

69

Batteries: Power to the Portables

by Lancelot Braithwaite

VIDEO's technical editor delivers a lesson on matching your power supply to your power needs.



page 58



page 72

69

Batteries: Power to the Portables

by Lancelot Braithwaite

VIDEO's technical editor delivers a lesson on matching your power supply to your power needs.

72

Tripods: Going Steady

by Henry B. Cohen

The video tripod is no ordinary tripod. Here's how it works, from (the tripod's) head to foot.

76

Summer Taping: Hot Tips for Warm Weather

by Marc Wielage

A primer in survival for the enterprising videophile who takes his equipment into hot spots.

Program Guide

News & Views	41
Top 10 Sales & Rentals	43
Directory	44
Reviews: Video & Film Clips	49

Videotests

by Berger-Braithwaite Labs	81
RCA VJP900 'Convertible' VHS VCR	
Sony SL-2700 Beta Hi-Fi VCR	
Sony HVC-2500 TTL Autofocus Camera	
Showtime Video Ventures VV-770PP Camera Color Processor	

Columns

Channel One	6
Hollywood Plays Washington	
Feedback	10
VIDEO Readers Air Their Views	
New Products	14
The Latest in Equipment	
Fine Tuning	18
Your Video Questions Answered	
Videogram	20
News from the World of Video	
Computer Ease	22
When You're Ready to Expand	
New Channels	26
The Disney Channel Arrives	
TV Den	30
Getting the Big Picture	
Arcade Alley	34
Spinoffs—New Tricks for Old Games	
Video Bookshelf	132
What to Read Between Programs	

PHOTO CREDITS: Les Morsillo—cover; 64-5, 69, 72-3, 81-101

ILLUSTRATION CREDITS: Steve Smallwood—20, 42 (left); David Prestone—21, 43; Stephen Sweny—41; Teresa Anderko—42 (bottom); Walter Gallup—42 (right); David Tamura—59; Ronald Chirrona—76-7



VIDEO (ISSN0147-8907) is published monthly by Reese Communications Inc., 460 West 34th Street, New York, N.Y. 10001. Second-class postage paid at N.Y.C., N.Y. and additional mailing office. © 1983 by Reese Communications Inc. All rights reserved. © under Universal, International, and Pan American Copyright Conventions. Reproduction of editorial or pictorial content in any manner is prohibited. Single-copy price \$1.95 in U.S. and Canada; £ 1.55 Sterling in U.K. One-year subscription (12 issues) \$15.00; Canada \$18.00 U.S.; foreign \$23.00 U.S. Address orders to VIDEO, Box 1118, Dover, N.J. 07801. Address all subscription correspondence and inquiries to VIDEO, Box 1116, Dover, N.J. 07801. Change of address takes 60 days to process; send old address label, new address, and zip code. All material listed in this magazine is subject to manufacturer's change without notice, and publisher assumes no responsibility for such change. Printed in the U.S.A.

POSTMASTER: Send form 3579 to VIDEO, Box 1116, Dover, N.J. 07801.

Videogram

News & Information from the World of Video

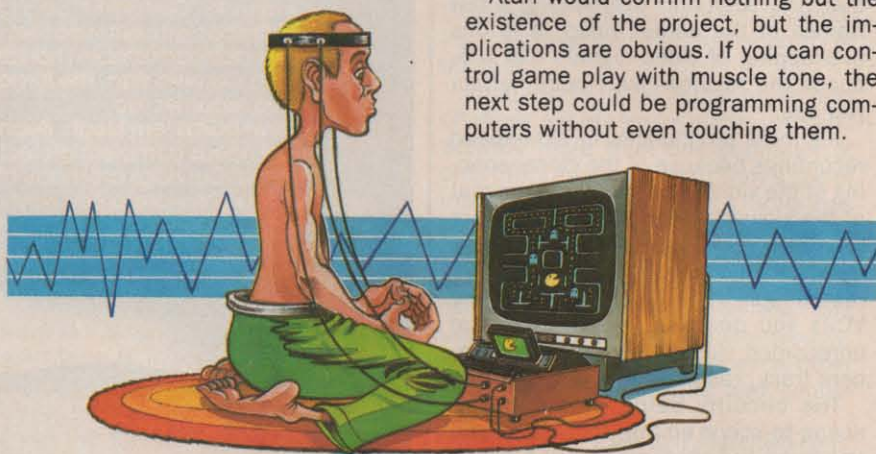
by Pat Wadsley



The Brain Game

How about a video game you can control with your brainwaves?

Currently being kept under wraps by Atari's special-projects division is a biofeedback control system. If it works the way traditional biofeedback systems do, signals picked up from either the muscular system, cardiovascular system, or central nervous system will control the action of the game. The player will be connected to the game by electrodes. According to Adam Crane—president of the American Biofeedback Corporation, involved in a separate biofeedback-game concept—Atari is probably focusing on muscle control first since it is easiest to develop.



Atari would confirm nothing but the existence of the project, but the implications are obvious. If you can control game play with muscle tone, the next step could be programming computers without even touching them.

Space Glasses

NASA has come up with glasses that show deaf people what others are saying. The glasses are called Autocuers and were designed by a NASA applications group at the Research Triangle Institute in North Carolina, and by scientists at Gallaudet College for the deaf in Washington D.C.

What you see
is what you get,
and maybe even
a large part of
what you'd hear.



Autocuers look much like ordinary wire-rimmed glasses—but within the wire rims are a microphone, microprocessor, and electron tubes. The microphone picks up the speaker's voice, the microprocessor translates speech into electronic signals, and the electron tubes make the signals look as if they're projected in front of the speaker's mouth. Each signal represents a con-

sonant. The area in which the signal appears determines what vowel comes after the consonant. If a symbol for G were projected at the top left side of the speaker's mouth, for instance, the Autocuer wearer would expect the vowel sound following to be a long O (thus, the word is "go"); projecting the G in a different location would denote a different vowel. Whole words are not identified all the time, so the Autocuers are used in conjunction with sign language and lipreading, but they do contribute to accuracy and enlargement of visually recognized vocabulary.

Autocuers won't be sold for another two or three years, following field tests and FDA approval.

Shaking the Booty

How do you get all us blue-collar criminals to stop bootlegging video? Instant Replay has an answer.

The Florida-based production house already creates music-news segments for MTV and *Entertainment Tonight*, and puts out *Instant Replay Video Magazine* (the first magazine on videocassette for the home hobbyist). Now it's coming out with a new cassette magazine that will cost a dollar less than a blank tape. For the first time, bootlegging will cost more than the original programming. The new magazine, *Cheaper Than Blank Tape*, contains 80 minutes of programming, 40 minutes of blank tape—and to allow for the cut-rate price, lots of advertising.

Chuck Azar, president of Instant Replay, has so far secured a tape manu-

facturer, a programmer, and Pierre Cardin to advertise in spots that cost upwards of \$20,000. Advertisers, says Azar, will be lured to *Cheaper Than Blank Tape* because of what's got to be a large guaranteed audience. "Last year 40 million blank tapes were sold," he says. "We won't get all of that, but we'll get enough." And Azar feels that durable content like "Searching for Truth in Las Vegas" (on how to use new video equipment shown at the Consumer Electronics Show) and pieces like the historic last interview with Vladimir Zworykin (who invented television) will make folks watch over and over—including the commercials.

The only problem Azar foresees is that some may be tempted to buy these cheapies by the carload and sell them as blank tape. But Azar's been in the video biz for awhile and feels he knows the retailers he can trust to sell only to customers who'll watch.

Olivia, Go Home

The Turner Broadcasting System started a music service last month, and *The Overnight Music Show* is determined to be squeaky clean.

Broadcast six hours per evening on Friday and Saturday nights, *The Overnight Music Show* relies on music clips furnished free by record companies, as MTV does. But unlike MTV, says Turner executive Scott Sassa, *The Overnight Music Show* "will have a tight policy on sex and violence." That means clips like the Rolling Stones' "Neighbors" will be banned. "Neighbors" fea-



There goes the neighborhood.

tured the band playing music in a room as the viewer looks in through a window, while other folks, including a hooker, go about their business behind other windows. Even a clip like Olivia Newton John's "Physical" is unlikely to be shown.

What the service will show—which MTV doesn't—are clips by R&B and other black artists like Earth Wind and Fire, as long as they fit into the Top-40 category.

16 Shows & What Do You Get

A hot new video trend has taken root in Erie, Pennsylvania where the American Video Exchange (AVE), which previously distributed videotapes, is now beginning to franchise video mini-theaters.

Video mini-theaters are little viewing rooms with built-in plush furniture where kids or adults can watch their choice of over 1000 movies. Theaters around the country have installed video-viewing rooms; AVE, however, leaves the choice of programming up to the viewer, not the theater.

At the American Video Exchange, a group of customers walk in, look at a sheet of titles, make their decision, pay \$5.95 to \$8.95 per group according to their choice of movie, and carry their free popcorn to their private sound-proofed booth. Erie's AVE is a 7000-foot space divided into dozens of mini-theaters, each holding two to six customers.

AVE's founder John Leonard says the biggest objection to video viewing is that people associate it with peep shows. But his best clients are kids whose moms find AVE a great baby-sitter. And junior's watching non-X-rated programming even Mary Poppins would love.

Other objections are coming from the major movie studios that supply the

films. Another video-viewing room in Erie, Maxwell's Video Showcase, is in court with several studios over copyright infringement—because, says Leonard, they refused to negotiate regarding licensing. Leonard adds that no law is on the books to prohibit individual rentals of films on tape, whether they're viewed at home or in a public viewing room like his. At any rate, the outcome of majors-vs.-Maxwell's should set a precedent.

Off the Wall

What would we ever do without Video Suspenders?

Created and distributed by Don McGinnis, former Santa Clara, California prosecutor, Video Suspenders are patented slings that hold TV sets of up to 100 pounds. McGinnis designed them to prevent reverberations that created acoustic and visual static when he placed his TV on a shaky surface. With Video Suspenders, which allow the set to hang freely, "definition is crystal-clear." Video Suspenders elevate the TV to eye level for easier viewing, and keep it out of reach of small children. So far McGinnis has sold about 600.



They cost \$29.95, and if you'd like to hang your TV, directions for safe suspension are included with the kit. If you don't have a TV set, you can always use it as a planter. (Write Sound Suspenders, Box 2923, Santa Clara, California 95055.)

Kicks

Who says you don't get any exercise if you play video games? Amiga, a game company formed in February by the former chief designer of the Atari 2600 and the business heads at Tonka Toys, is coming out with the Joyboard—a skateboard-type attachment that gives video gamers a workout.

The Joyboard plugs into the console where you usually would plug in your

joystick. You guide screen action by standing on it and applying pressure and weight to different parts of the board. The Joyboard can be used with any games played on the Atari 2600, but is specifically designed to go with a new slalom ski game, "Mogul Maniac."



What bodily parts will they harness next?

Amiga's next Joyboard game is a surfing game, and lots of other possibilities are in store.

The Joyboard can be played on carpet or floor and can hold up to 500 pounds. It costs \$39.95 alone or \$49.95 with "Mogul Maniac."

Vidbits

It's ridiculous—but the Three Stooges, years after the fact, are more popular than ever. Their TV show is shown on 60 stations across the country. The Three Stooges Fan Club has 20,000 members, most college-age and older, and there's even going to be a new movie about the Stooges—one will be played



'So, you refuse to pay our royalties?'

by Robin Williams. But the biggest news (for video-game addicts, anyway) is the video game being negotiated by Columbia Pictures. Columbia is meeting with an undisclosed software company and discussing how best to represent the trio's antics. Soytenly!

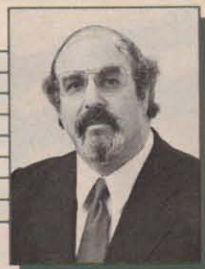
TV's Quincy sure likes his popcorn, and so does New York City. Jack Klugman's new popcorn shops feature 28 flavors ranging from the wild (chocolate fudge, banana, cinnamon) to the more mundane (garlic, barbecue, cheese). Customers are lining up around the block in three Big Apple locations. Klugman and his partner plan franchises across the country.



Computer Ease

The Human Interface

by Ivan Berger



When You're Ready to Expand

So you want to expand your Apple II? Just yank off the hatch and plug in the right board. The more slots in the machine, the more expandable.



A computer should not be thought of as a single unit, like a TV set, but as part of a component system—a concept familiar to readers of VIDEO. In other words, the more serious and wide-ranging your applications, the more important will be your computer's expandability. The more you can add to it, the more it can do for you.

When computer makers talk about expandability they usually refer to the possibility of adding hardware, and we'll get to that in a bit. But the simplest and most universal way to expand a computer's functions and utility is to buy more programs for it. No computer made won't let you do this—but some are more expandable than others in that more programs are available for them. The Apple II series and the Atari, Radio Shack, Sinclair/Timex, Commodore, and IBM computers are probably the champions in this regard, with Texas Instruments coming up fast.

The more the merrier. A word processor, general ledger, and choice of games may be enough for a computer. But if a choice of word-processing or ledger programs and a host of games are available, the odds increase that you'll find just the programs you want. If you find "control-D" a more logical command than "control-X" for deleting something, one program doubtless works that way (I know at least two, in fact). But if you think of the process as "x-ing out," there's probably a program somewhere that would let you do it that way. What you want is a program that does things as closely as possible to

the way you already do them—or which turns its failure to do so into an advantage. The wider the choice, the more likely you will find just that.

A new computer company rarely starts out with a wide choice of software on tap, so many companies latch onto software libraries already available for other computers by designing their computers to run those programs. So we have the Franklin Ace and Basis, which run Apple software, the LNW-80 and MAX-80, which run Radio Shack software, and a dozen or so computers running IBM PC software.

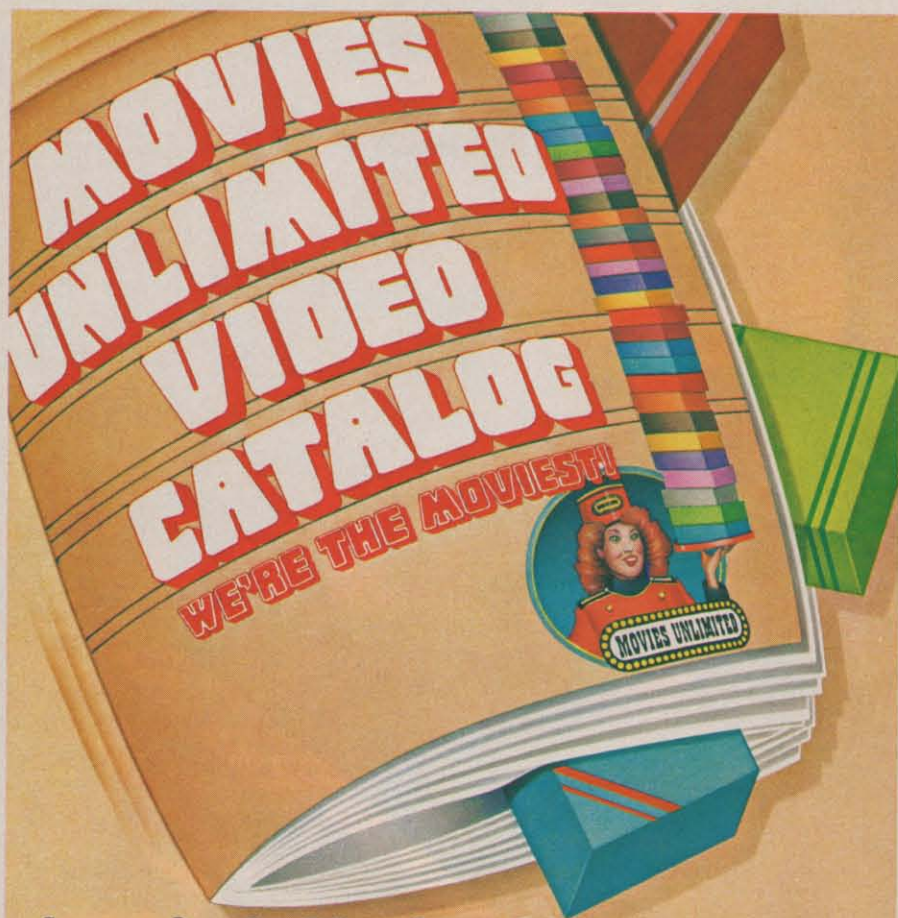
Then there are the CP/M machines. CP/M is a "disk-operating system" (DOS)—a program the computer uses to keep track of where things are on floppy disks, and how to get data on and off them. It's not the easiest DOS to learn, or the friendliest, but it was designed for easy adaptability to a wide range of computers and many of them have thus adopted it. If your computer can use CP/M, the odds are that virtually any CP/M-compatible program available for other machines will ultimately be available for yours.

But it may be later rather than sooner because not all CP/M computers put their programs on disk in the same way. Eight-inch floppy-disk recording is a standard format, but among the more popular 5¼-inch disks anarchy reigns; disks recorded on one computer may not be readable on computers of another make. Smart manufacturers are therefore specifying when their CP/Ms are compatible with a larger com-

pany's. The Kaypro portable computer, for example, uses the same format as the Xerox 820, and Kaypro takes pains to let users and buyers know it.

Not all computers can use CP/M directly. The computer must have a Z80 or 8080 processor, and many popular computers have the wrong ones (such as the Apple II series and Atari 800, which use the 6502, and the IBM PC with its 8088). Also, CP/M demands that RAM memory begin at the lowest possible "address" (numerically defined physical location on the micro-processor), 0000. Some computers (notably the Radio Shack TRS-80 Models I and III) start memory at higher addresses.

It's possible, however, to adapt all these computers for CP/M. For the TRS-80s you must fit in a board for which the computer's designers did not originally allow; for the Apple, Atari, and IBM, you just open a hatch and plug in a board for which an appropriate receptacle is waiting. These last three computers are easy to adapt because of their "bus structure"—their main internal circuits run through several connectors, into which more boards can be plugged as needed. That tradition goes back to the first influential home computer, the MITS Altair of 1975. The unit is no longer made but its bus lives on in slightly modified form as the S-100, now an official standard of the IEEE (Institute of Electrical and Electronics Engineers); expandability is what kept the design alive long after the original computer was dead. Plug-in boards can be for



America's Moviest Video Catalog Just Got Movier.

Brand new 1983 edition!

- 1000's & 1000's of titles on VHS, BETA, VideoDisc—*Nobody has more!*
- Order with confidence from one of America's largest, most dependable home video services.

It's bursting at the seams with pure video entertainment. From early silent films to the latest releases . . . the classics (and not-so-classics) . . . concerts . . . cartoons . . . famous tv shows . . . foreign films . . . sports . . . hard-to-find titles . . . the list goes on and on. You'll also find complete listings for video games, accessories, blank tapes and more! Imagine—154 pages jam-packed with a complete description of every title, trivia, delightful photos and illustrations . . . and access to the *entire* exciting world of home video. So stop searching. And start finding. Order yours today!

(Enjoy Adult Video? Enclose an additional \$2 for our huge Adult Video Catalog!)

☐ Enclosed is \$5 (cash, check or money order). Send me your new Video Catalog, plus periodic updates of new releases and sale items.

☐ Enclosed is \$2 additional. Please include your Adult Video Catalog. I am over 18 years old.

Order now!
Only
\$5.00
(Catalog fees
refunded with your
first order)



6736 Castor Ave. • Phila., PA 19149
215-722-8298

Name _____
Address _____
City _____ State _____ Zip _____
Phone _____



© 1983 Movies Unlimited, Inc.

many purposes: to add more memory, put more characters on the screen, interface with outside "peripheral" equipment (such as printers, terminals, and modems), enhance the system's graphics, or even for such special purposes as weighing, measuring temperature, and testing audio equipment or acoustics. The more slots, the more expandable the system.

But other ways exist to build in expandability without using a plug-in bus. Take the Radio Shack computers: though the Models 12 and 16 have plug busses, the more popular Model III does not. Yet it is definitely expandable. In its most limited and least expensive form it has provisions for adding more memory (up to 48K), an RS-232 serial port for use with modems and some printers and other devices, more detailed (though still black-and-white) graphics, a controller for four floppy-disk drives, and slots for two internal drives.

Installation is not as simple as in bus-structured systems, but the possibilities are there. And you can add still more devices externally: the computer comes with a one-way parallel port to feed a printer, a jack for connection to a cassette recorder, and a short extension of the machine's internal bus to which still more devices (such as hard-disk drives) can be attached. The floppy-disk controller also has provisions for two external drives in addition to the two internal ones.

Other non-bus methods allow for hardware expansion. Radio Shack's Model I (now discontinued) had an "expansion interface," a concept since used in various ways by Texas Instruments, Atari, SpectraVideo, the handheld Panasonic/Quasar/Olympia HHC, and others. The Model I's expansion box included a printer port, a port for a second cassette recorder, space to hold more memory, an RS-232 port, and a disk controller. The Televideo version handles seven devices according to preliminary information—all unspecified except for the floppy-disk drive.

Another approach—taken by some pocket computers—is to include a peripheral or two, with interfaces, in a snap-on unit. Sharp's new \$119 PC-1250 docks in a \$179 module which combines a small printer (using adding-machine tape) with a microcassette recorder for saving and loading programs, plus an interface for use with regular cassette recorders.

All this, however, covers only expansions directly sanctioned or envisioned by the computer maker. Many more exist to correct deficiencies or omissions which the original manufacturer failed to recognize. We'll cover those next month.



Ivan Berger is technical editor of Audio Magazine.

The TV Den

Understanding Techniques and Technology

by Roderick Woodcock



Getting the Big Picture

Reader Don Greene of Ingleside, Illinois disagrees with my less-than-enthusiastic endorsement of the Beamscope and its picture quality ("Fine Tuning," October 1982). Writes Don, "You are wrong in telling your readers not to use the Beamscope. I have one of these 'optical miracles' and am very happy with it. There is no distortion if it is used correctly."

Don says he has shown off his Beamscope to friends and neighbors and reports that all were impressed with it and intended to buy one. "Not everyone can afford to go out and spend \$2000 for a big screen, and this is the next best thing. For \$59.95 you can't go wrong."

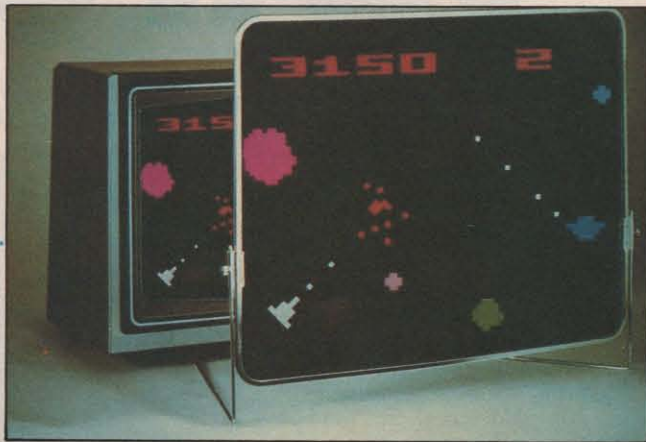
Fair enough. Maybe the Beamscope is worth another look. If you haven't heard of it before, the Beamscope is a rectangular, almost flat fresnel lens molded from clear acrylic. It's finished around the edges with a smooth metal band fitted with adjustable clips that let you mount it directly in front of your TV screen.

While I had seen the Beamscope at trade shows, I had never had a chance to live with it for a while. So I mounted a test unit (model TS-30) in front of my 19-inch Sony Profeel monitor. Setting it up took no time at all. You can use either a swivel mount that lets you rotate the entire TV to suit any viewing angle (\$20 extra), or a fixed wooden platform (included) that lets you attach the Beamscope directly in front of the TV screen, the method I used. The TS-30 enlarged my 19-inch picture to a much larger 30-inch image—over twice the viewing area.

The TS-30 is the mid-sized Beamscope, designed for 17- or 19-inch sets. Smaller screens down to 12 inches use the TS-25, which creates a 25-inch image. The largest model is the TS-41, a freestanding screen designed for TVs larger than 19 inches. It turns a 21- to 26-inch screen into a 41-inch image, and is available in either the standard metal frame or an attractive wooden frame that stands by itself in front of the TV.

The image size and degree of magni-

***The Beamscope!
It blows up games!
But make sure you
watch the screen
head-on or you
won't see much.
(Avoid off-angle
viewing and you'll
have no problem.)***



fication is variable with all three models, depending on how far in front of the TV screen you position the lens. If you position the Beamscope far enough in front of your set, you can even magnify a central portion of your TV image larger than the 4-power recommended. Obviously that feature wouldn't be desirable for regular TV viewing since you would lose part of the viewable image. But for some video games in which the playfield is centered in the middle of the screen, the continuous-focus feature is an advantage.

The important question is about picture quality: how good (or bad) was it? I must admit I was impressed. Beamscope spokesman Richard Ilnicki explained that the colored halos and rainbow patterns exhibited by earlier models have been significantly reduced in the latest versions by decreasing the depth of the concentric rings cut into

the plastic. The pattern of the grooves is also less visible than before due to closer spacing and improved molding techniques. All this added up to a picture that, while not the equal of a quality projection-TV system, was quite acceptable for many things—not just the video-game usage to which I consigned the unit last October.

This was no quick review. I watched a lot of TV through the Beamscope, and I noticed a few quirks. For one thing, you must mount the lens perfectly parallel to the surface of the TV. If the angle changes slightly, the picture becomes misshapen: narrow at the top and wide at the bottom. Geometry buffs will recognize that shape as a "trapezoid." Careful adjustment of the mounting bracket cures this problem.

Heavily contrasted scenes produced a strange pattern of radial streaks on the screen, usually noticeable when let-

*"World
Leader"*



*The Original
Pioneers of
Video Movie
Stores*

A Video Station Movie Store Lets You Make It On Your Own With Lots Of Help From Us!

NO FRANCHISE OR ROYALTY FEES
PROTECTED TERRITORY
NATIONAL AND REGIONAL ADVERTISING AIDS
COMPLETE PROFESSIONAL TRAINING,
ADVERTISING/PROMOTIONAL MATERIALS,
ONGOING MARKETING/ADVISORY SERVICES

Our fully equipped Turn-Key Package is only \$34,500. For
information on our complete Store Program write or call today.

To: Ed Gallagher, Director of Marketing
THE VIDEO STATION, INC.
1740 Stanford St.
Santa Monica, CA 90404
(213) 453-5535



**NOW...TRANSFER YOUR
PRECIOUS HOME MOVIES
AND SLIDES TO CONVENIENT
VIDEOCASSETTES!**



USE THIS COUPON TO RECEIVE A

FREE FILM-TO-TAPE TRANSFER ORDER KIT!

☐ **YES**, please send me the FOTOMAT Film-to-Tape Videotape Transfer Order
Kit absolutely free—with no obligation whatsoever. Also, please send complete
information about the fun and convenience of seeing my movies and slides on tele-
vision, while protecting them from scratching, projector damage and aging. I under-
stand the low cost (lower than I ever imagined!) includes cleaning and lubricating
the film as well as electronic processing to actually enhance the images and colors.
You can even add background music!

**SEE FOR YOURSELF BY TAKING ADVANTAGE OF THIS FREE OFFER.
YOU ARE UNDER NO OBLIGATION WHATSOEVER!**

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

Check type of transfer you are interested in:

☐ 8mm, ☐ Super 8mm ☐ 35mm Slides (approx. # of slides _____)

Mail to: FOTOMAT Video Transfer Service

8849 Complex Dr., San Diego, CA 92123

VM73

ters appear at the beginning or end of
movies or during commercials. The
shiny surface of the lens also caught
and reflected room lights and windows
from time to time. But this problem is
often shared by conventional TV sets
sans Beamscope, and can often be
adjusted for by drawing drapes or locat-
ing or dimming lights so that they don't
create uncomfortable glare.

About the most disturbing problem
with the Beamscope I evaluated was an
occasionally annoying "busy" section
at the center of the lens where the pat-
tern of concentric rings grows dense.
A Beamscope spokesman told me
the maker is working to eliminate that
distraction as well.

The Beamscope is pretty much a per-
sonal viewing accessory. Its design
limits the viewing angle to one person
(or two close friends) seated directly in
front of the screen. Viewing the picture
from a sharp angle is difficult and
sometimes impossible.

All in all, while the Beamscope pro-
vides a picture that (as Mr. Greene
says) is no match for the sophis-
ticated three-gun projection systems
selling for thousands of dollars, it's still
an economical viewing alternative that
may suit the budget and taste of many
viewers. I didn't use my Beamscope all
the time; its easily installed mount-
ing bracket enables you to put it on or
take it off as often as you wish, depend-
ing on what you're watching and how
well the subject (sports, movies,
games) stands up to the Beamscope's
enlarging effect. The kids, for example,
may find it great for those Saturday-
morning cartoons.

Despite its simple premise, the
Beamscope is no toy and certainly not a
gimmick. Ilnicki emphasizes that while
its manufacturer views the Beamscope
as a home-entertainment accessory, it
has found success in the industrial are-
na as well. He has one testimonial from
a woman whose failing eyesight nearly
cost her her job operating a video-
display terminal ("VDT"). A small Beam-
scope saved the day and a special
Beamscope for VDT users is on the
drawing board. Since virtually every
computer uses a video terminal for dis-
play, the unit could be useful for many
terminal workers.

But with any home-entertainment
product, especially one that confronts
sometimes-subjective considerations
like picture quality, the ultimate deci-
sion rests with you, the consumer. You
may not like the idea at first or you may
find its slight visual flaws more than you
can stand. On the other hand you could
be pleasantly surprised and find, as I
did, that the Beamscope grows on you
after you've used it awhile. I don't use
my unit all the time, but it's fun to have
around for an occasional movie. If
you've heard about it but haven't seen
it—take a look.



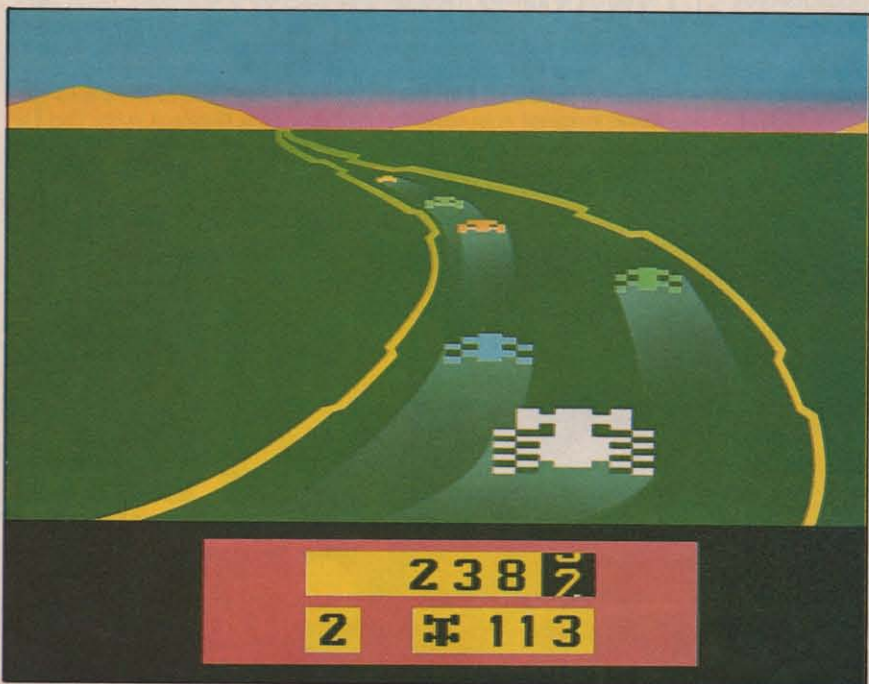
Arcade Alley

A Critical Look at Video Games

by Bill Kunkel & Arnie Katz



Spinoffs — New Tricks for Old Games



Activision's 'Enduro' (above) and Atari's 'Ms. Pac-Man': new tactics and superior graphics revive two established genres.

Electronic gaming is seldom dull, and those who fret that boredom may eventually overtake the 40 million Americans who avidly play coin-op or home electronic games can relax. New games popping up for game systems and home computers guarantee continued high excitement.

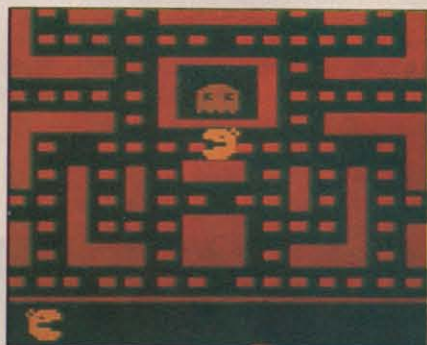
The most potent harbinger of good things to come is that few new titles are cynical ripoffs of established games. True, many individual programs have appeared within such popular genres as the scrolling shootout, maze chase, and climbing and invasion categories, but game producers are making a sincere effort to avoid sliding into the oh-so-seductive "me too" trap that throttled the popularity of coin-op pinball. There's a crucial distinction between a game that's an unmitigated ripoff and one that's just in the same genre as an existing program. "Miner 2049er" for example is but one of a host of climbing and jumping games which have come out in the wake of "Donkey Kong" 's immense success. Yet anyone who tries a few rounds of "Miner" will quickly realize it calls for an entirely

new set of tactics than those used in "Kong."

This month's "Arcade Alley" concerns games which either add something novel to a longstanding genre, or strike out in new directions. First we'll check out a maze-chase and a car-racing game (both designed for the Atari 2600) which are bound to give their categories a new lease on life.

At last, redemption! With the publication of **Ms. Pac-Man** (Atari/Atari 2600), the home version of Bally's much-loved sequel to "Pac-Man," Atari has helped restore its image as a producer of top-of-the-line cartridges. Where Atari stumbled badly with the 2600 edition of "Pac-Man," this time it has struck the bullseye dead-center.

"Honey don't you know, I'm more than 'Pac-Man' with a bow!" crows Ms. Pac-Man in TV ads for the cartridge. And she isn't bluffing—every facet of the home version rings true to its multiscreen coin-op inspiration. Ghosts have moving eyes, a cartload of bonus objects dances across the screen at appropriate times, and there's even an attract mode in which four ghosts dance in a

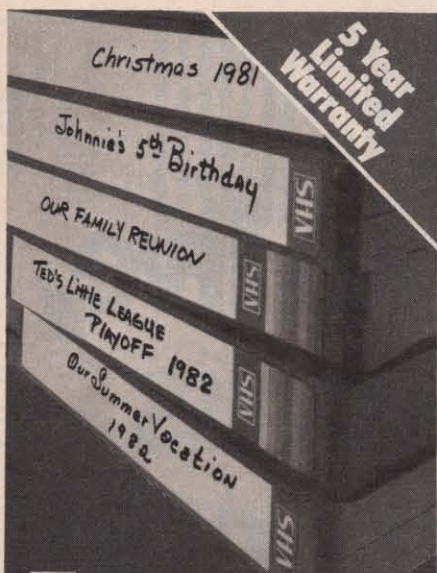


circle around the glamorous gobbler. The player's joystick control of the on-screen heroine is fairly smooth, particularly when compared to the erratic stick response in Atari's "Pac-Man." Cornering can still be a bit of a sweat, but hardly a major problem.

"Ms. Pac-Man" 's playfield features do much to open up play, and they break out of the limited pattern-conscious strategy that marred both coin-op and home versions of "Pac-Man." The extra escape tunnels in particular provide many strategic alternatives lacking in the older contest. And bonus items don't unfailingly appear in the same place every time (just south of the ghosts' pen). Deciding whether to chase or ignore each new bonus object is now a prime consideration. So if you enjoy maze-chase action at its finest, be sure to make a date with "Ms. Pac-Man."

Enduro (Activision/Atari 2600) makes it easy to believe that a system like the 2600, invented to play simple games like "Pong" and "Combat," could present a full, rich contest. "Enduro" is a first-person racing game created along the lines of coin-op extravaganzas like "Turbo" (Sega) and "Pole Position" (Atari). It's a visual delight, packed with just about every graphics trick in the programmer's book plus a few conjured up expressly for the occasion.

The electronic driver begins the competition in the first—and easiest—heat. The computer constantly tracks and reports the distance traveled in miles and the position of the player's car relative to the other vehicles in the race. Pressing the action button controls speed, suiting "Enduro" to the



These Memories Were Made Possible With Velbon...

Velbon offers a wide selection of video tripods and accessories to help you keep taping those special memories and occasions.

Ask for Velbon or write:

Velbon TRIPOD

Velbon International Corporation
2433 Moreton Street,
Torrance, CA 90505
213/326-7902

In Canada:
Optex Corporation
52 Lesmill Road,
Don Mills, Ontario M3B 2T5
416/449-6470



© Velbon 1983

widely available gourmet joysticks that feature a top-mounted button. The acceleration increases as long as the home arcader holds the button down though pulling back on the stick allows fast braking for sudden stops and slow-downs. The course of the race car is controlled with horizontal movements of the joystick. Play action is so realistic that electronic drivers will practically feel the tug of inertia as their cars spin around a sharp turn. And despite the lack of a steering wheel, the simulation is satisfying.

But what will really make most gamers' enthusiasm hit on all eight cylinders is the way "Enduro" looks. The race begins at high noon with a cheery sun in a blue sky, but the blue turns to vermillion and then magenta as the golden orb sinks slowly toward the horizon, and after dusky twilight comes inky night. You'll have only the lights of oncoming cars to guide you as your machine gamely hugs the treacherous highway. Even the approach of dawn doesn't end the danger. Rather, it ushers in a pea-soup fog. This miasmic mist enshrouds the course so thoroughly that only the cars directly ahead are visible.

Crashing stops the player's car cold, and getting back into the action means generating fresh momentum from square one. In "Enduro" (as in most games of this type) it is often better to cut speed and avoid a time-wasting crash than just barrel down the road at full throttle. The finish is exciting: a siren wails its warning as the player frantically floors his pedal in order to pass the last few cars noted on the on-screen countdown indicator. Scoring a successful heat means you're ready to step up in class and try some serious racing.

"Enduro" is awesome; it combines excellent play action and graphics that challenge even the majesty of ColecoVision's "Turbo"—wheel, pedal, and all. This singular programming feat is the slickest, fastest-moving cartridge ever released for the Atari 2600.

Things are just as exciting over in the computer division. This month we'll examine a program for the Apple that does something new with the invasion-game format, and another disk for the Atari 400/800/1200 XL computer systems that presents unusual challenges.

The rather prosaic name of **A.E.** (Broderbund/Apple II/48K) cloaks one of the best shoot-'em-ups published in 1983. The situation seems fairly dire at the start of the opening round: maintenance robots have gotten out of control and are cleaning planet Earth to death. The player must force these immortal automatons back bit by bit until they are pushed so far from Earth that it will take centuries for them to clean their way into our corner of the universe. The arcader must pull off a "perfect attack" to progress from one scenario to the

next, which means wiping out an entire wave of metal monsters without losing the cannon based along the bottom of the screen.

The chief innovation in "A.E." is that the assaulting androids swoop and soar across the screen in a painfully hard-to-hit pattern. The fluid movement of the targets is an elaboration on the play action "Galaxian" introduced to the invasion game. But this time the entire attack wave is in constant motion, not just a small number of divebombing monsters breaking off from an essentially stationary formation. The maintenance robots perform their aerial acrobatics in single-file, like airborne serpents—often to their disadvantage, for it is possible to detonate a chain reaction that eliminates most of a deadly string by hitting one of the attackers at or near the head of the line.

"A.E." is a triumph, mainly because it breathes new life into the tired invasion-game genre. Its fast-paced play action poses an entertaining challenge to arcading's best marksmen.

Mar Tesoro (Synchro/Atari 400-800-1200) may be the finest example of a life-simulation computer game. Players function as skippers of salvage vessels and, based on a small starting stake, comb the deep for gold and other valuables. Players may use their modest supply of cash to buy gear from an on-screen menu before getting into the game itself.

Available equipment ranges from essentials like scuba gear to a genuine diving bell (for experienced, wealthy players only). The best investment is to hire a historian, a handy guy who can evaluate the worth of whatever you haul up from the ocean. But first-time explorers will probably want to stick with scuba gear and confine their investigations to the shallows just offshore. After you've accumulated treasure that can be sold, you can afford some fancier equipment, and your ship can then venture into areas where more valuable treasures may be found.

The position of the ship is charted on an overhead on-screen map and moves with flicks of the joystick. In fact all commands are entered using the joystick, which makes "Mar Tesoro" surprisingly easy to play for so rich a program. Once the ship takes up the desired position, the display switches to a side view to monitor the actual dive. Remember that diving too deep with inadequate gear will give your treasure hunter the bends! Other factors can affect the cooperativeness and competence of your crew, such as how fairly you distribute the accumulated booty.

"Mar Tesoro" certainly doesn't have the excitement level of the latest scrolling shoot-out, but if you want something different to test your wits, this game takes the prize.



Play THE VIDEO CONNECTION™ MILLION DOLLAR

"SCRATCH AND MATCH"™ Over \$1,000,000 in Prizes!

Pick up your valuable game tickets each time you visit your local participating Video Connection Store. Scratch off silver patch to reveal play area.



Match your play area to pictures on the poster at your participating Video Connection Store, and you can win the following INSTANTLY!

2 Grand Prizes

RCA 45" giant projection TV set model PGR200 (\$3,395.00 approximate retail value)



4 Second Prizes

RCA Portable Video Cassette Recorder Model VGP170 (\$1,400.00 approximate retail value)



3 Third Prizes

RCA Video Camera Model CC015 (\$1,400.00 approximate retail value)



4 Fourth Prizes

RCA Video Disc Player Model SGT075 (\$300.00 approximate retail value)



3 Fifth Prizes

RCA 13" TV Set Model EGR333W (\$479.99 approximate retail value)



10 Sixth Prizes

Texas Instruments Personal Computer Model 99-4/A (\$450.00 approximate retail value)



5 Seventh Prizes Round trip tickets for two anywhere Continental Airlines flies in Domestic U.S.A.



100 Eighth Prizes Jack Adams Adventure Package Games (Adventure cartridge and cassette model PHM3041T) (\$49.95 approximate retail value)

4,000 Ninth Prizes Atari Game Cartridge of your choice from store's existing inventory (\$25.00 approximate retail value)



4,000 Tenth Prizes Video Connection blank video cassette (\$15.00 approximate retail value)



9,000 Eleventh Prizes

6 Month Subscription to Video Magazine (\$10.50 approximate retail value)



1,000 Twelfth Prizes

6 Month Subscription to Electronic Games Magazine (\$15.00 approximate retail value)



133,333 Thirteenth Prizes

A Video Cassette 1-Night (Monday-Thursday) Movie Rental movie of your choice from dealer's existing inventory (\$5.00 approximate retail value)



8,000 Fourteenth Prizes Galacticoon 500 worth \$5.00 on purchases of any product at Video Connection store where game is played.

80,000 Fifteenth Prizes Galacticoon 100 worth \$1.00 on purchases of any product at Video Connection store where game is played.

200,000 Sixteenth Prizes Galacticoon 50 worth fifty cents on purchase of any product at Video Connection store where game is played.



Be sure to also enter the "Second Chance Sweepstakes" to win two prizes: (1) Two Continental Airlines tickets to the South Pacific, and (2) Two tickets anywhere Continental Airlines flies world wide.

No purchase necessary. You must be over 18 years of age to play. Official rules, restrictions, and any additional prizes posted at each participating store. Void in Ohio and wherever else prohibited.

1 out of every 5 wins instantly

For additional information, circle No. 21 on Reader Service Card.



PLAY TO WIN AT ALL PARTICIPATING VIDEO CONNECTION STORES NATIONWIDE.

CALIFORNIA

Citrus Heights
5966 Sunrise Blvd
Granada Hills
18121 Chatsworth
La Canada Flintridge
520 Foothill Blvd
Lawndale
15820 Hawthorne Blvd
Mill Valley
312 Town & Country Village
San Jose
Capitol Square

CONNECTICUT

Bridgeport
3851 Main Street
Danbury
Commerce Plaza
Fairfield
Heritage Square
Groton
175 Bridge Street
West Hartford
Corbino's Corner Shopping
Parkade
Westport
44 Church Lane

DELAWARE

Greenville
Greenville Shopping Center

DISTRICT OF COLUMBIA

Washington, DC
5039 Connecticut Ave., N.W.

FLORIDA

Clearwater
1907 North Hercules
Coral Springs
Royal University Plaza
Fort Meyers
4460 "D" Cleveland Ave.
Largo
Village Vendor Shopping
Plaza
S. Pasadena
5800C Golfport Blvd South

GEORGIA

College Park
5893 Old National Highway
Marietta
Sprayberry Crossing
Shopping Center
Roswell
1540 E. Old Alabama Rd

ILLINOIS

Chicago
9542 S. Western Ave.
Chicago
1368 E. 53 St.
Des Plaines
621 W. Golf Rd.

INDIANA

Evansville
Lawndale Shopping Center
Greenwood
1140 N. State Rd. (Rt. 135)
Richmond
Gateway Shopping Center

IOWA

Des Moines
7104 University Ave.

LOUISIANA

Kenner
321 W. Esplanade Ave.

MARYLAND

Bethesda
Hechinger Plaza
Cockeysville
9731 York Road
Columbia
Longreach Shopping Center
Frederick
Frederick Towne Mall
Bowie
Free State Mall
Gaithersburg
284 N. Frederick Ave.
Beltsville
Calverton Shopping Center
Kensington
10632 Connecticut Ave.
Millersville
326 Benfield Blvd. Plaza
Rt. 3 Benfield Plaza
Olney
18268 Village Mart Dr.
Reisterstown
11708D Reisterstown Rd.
Rockville
807 B Rockville Pike

MASSACHUSETTS

Boston
230 Newbury Street
Brockton
362 Belmont Street
Burlington
271D Cambridge Street
Hyannis
142 Corporation Road
Milford
174 Main St.
Needham
1091 Great Plain Ave.
N. Dartmouth
K-Mart Shopping Plaza
Faunce Corner Road
North Reading
Atlantic Shopping Center
North Swansea
55 James Reynolds Rd. Rt. 136
Pembroke
254 Church Street
Randolph
Randolph Shopping Center
Saugus
639 Broadway
Salem
540 Loring Avenue
Weymouth
Shaw's Plaza
Worcester
1241 Main Street

MICHIGAN

Farmington Hills
25898 Middlebelt Rd.
Madison Heights
1425 W. 14 Mile Rd.

MINNESOTA

Bloomington
Loehmann's Plaza Shopping
Center

NEBRASKA

Omaha
Orchard Plaza
York
South Lincoln Ave.

NEW JERSEY

Cherry Hill
1250 N. Kings Highway
Hillsdale
128 Broadway
Parsippany
Troy Hills Shopping Center

NEW YORK

Albany
1796A Western Avenue
Albany
Wolf Road Shoppers Park
Brooklyn
1924 Avenue U
Cedarhurst
77A Columbia Avenue
Clifton Park
Fire Road Plaza
Croton-on-Hudson
Shoptite Plaza
Delmar
125 Adams Street
East Northport
528 Larkfield Road
East Meadow
1874 Front Street
Fishkill
Dutchess Mall, Rt. 9
Franklin Square
727U Franklin Avenue
Fresh Meadows
185-22 Horace Harding Exp.
Greenvale
1 Glen Cove Road
Latham
883 New Loudon Road
Mamaroneck
174 East Boston Post Road
Merrick
27 Merrick Avenue
Middle Village
75-48 Metropolitan Avenue
New York
209 Columbus Avenue
Oyster Bay
29 Audrey Ave.
Pearl River
100 North Middletown Road
Plainview
1123 Old Country Road
Rockville Centre
21 North Park Ave.
Sayville
203 N. Montauk Hwy.
Schnectady
123 Canal Sq.

Sunnyside
43-44 46th St.
Tonawanda
2788 Sheridan Drive
Wantagh
1174 Wantagh Avenue
Williston Park
310 Hillside Avenue

NORTH CAROLINA

Goldsboro
2814 Cashwell Drive

OHIO

Stow
4972 Darrow Road
Wadsworth
217 Great Oak Trail
Willowick
29102 Lakeshore Blvd.

OKLAHOMA

Enid
516 W. Broadway

PENNSYLVANIA

Chambersburg
23 North Main Street
Dresher
Dresher Town Plaza
DuBois
Sandy Plaza, Rt 255
Flourtown
1862 Bethlehem Pike
Montgomeryville
202 Market Place
Narberth
944 Montgomery Avenue
Philadelphia
7319 Castor Avenue
Pittsburgh
Greentree & Cochran Road
Quakertown
Quakertown Shopping Plaza
Trexler Mall, next to M.O.M.

RHODE ISLAND

Johnston
1478 Atwood Ave.
Middletown
567 East Main Road
North Kingstown
Post Road Plaza

TEXAS

Amarillo
Wellington Square Shopping
Cntr. A #180

VERMONT

Brattleboro
Main Street Gallery

VIRGINIA

Alexandria
8736 Cooper Road
Arlington
4145A Wilson Blvd.
Fairfax
11212 Lee Hwy.
Virginia Beach
College Park Square
Virginia Beach
Timberlake Shopping Center



New Franchises available
1-800-645-7439 (in N.Y. 516-364-9520)
offer by prospectus only.

Over 190 franchises nationwide
bringing you the products and knowledge of the 21st century.