

# The Personal Electronics Buyer's Guide

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A SPECTRUM BOOK

*Prentice-Hall, Inc.*  
*Englewood Cliffs, N.J.*



Courtesy: Bally

**FIGURE 3-10(b)**  
*Bally's Fireball features everything that Galaxy Ranger has plus a music synthesizer that plays "We're in the Money" when an extra ball is awarded and "The Party's Over" when the game ends. It also has a volume control.*

Colēco's Shoot and Drive triangular cartridge video system, selling for between \$100 and \$125, competed fiercely with APF's M-1000 (Figure 3-16).

**Bally.** The Bally Professional Arcade™ (see Figure 3-17) contains one of the most powerful microcomputers in the field, the Zilog Z-80. Its inventors maintain that some day you will find yourself talking to your TV set. Of course, you may be doing that now, but with the Arcade, the set will talk back to you! Because of its great capability, the Arcade not only converts your TV into a source of entertainment, it will also help you in your home finances, business, education, and even the arts. Further, its programmability means it will not become outdated because the plentiful software will be kept compatible, according to the manufacturers.

**Unisonic.** Unisonic's color videogame offers eight challenging sport games—tennis, soccer, squash, practice, basketball, gridball, hoops, and

## **CROSSING OVER TO HOME COMPUTERS**

Some programmables come very close to home/personal computers. The tendency was evident in the early microprocessor games with computer-like capabilities, and the gradual augmentation continued only slowly at first. Fairchild's early Video Home System (now Channel F) was one of the first to utilize plug-in ROMs for different amusements and challenges. The Apple II Home Computer has pistol grips and graphic capabilities inherent in its BASIC language dialect to permit a programmed game of Pong, among many other games.

### ***The Famous Radio Shack TRS-80 And Some of Its Competitors***

The "slam-bang" TV advertising of the Tandy Corporation for its Radio Shack Division TRS-80 computer system during 1978 was one of the biggest and best breaks the personal computer industry could receive. During the first eighteen months of the campaign, the best estimate of sales from most market analysts (with some Radio Shack officials agreeing to figures "in that range") was 130,000 systems. That number brought Texas Instruments, Xerox, Hewlett-Packard and IBM—among others—to *rushed* competition in late 1979 and early 1980. Also because of these large sales figures and the expansion of the Radio Shack campaigns, scores of companies are offering specialized software, hardware peripherals and accessories for this system, and Radio Shack was reported to have at least three new systems ready for introduction during late 1979 and 1980. Its strongest competitors on the low end the Apple, Exidy, Interact, Mattel, Atari, and Bally—gave Radio Shack rough going for the personal computer market. The Texas Instruments president liked to call the first two personal systems the company offered: "HIS" for Home Information System and "HERS" for Home Educational and Recreational System. So Radio Shack has a fight on its hands with a dozen or more competitors—all strong, experienced companies. But the market is already huge—and it will never be saturated, at least for a generation to come.

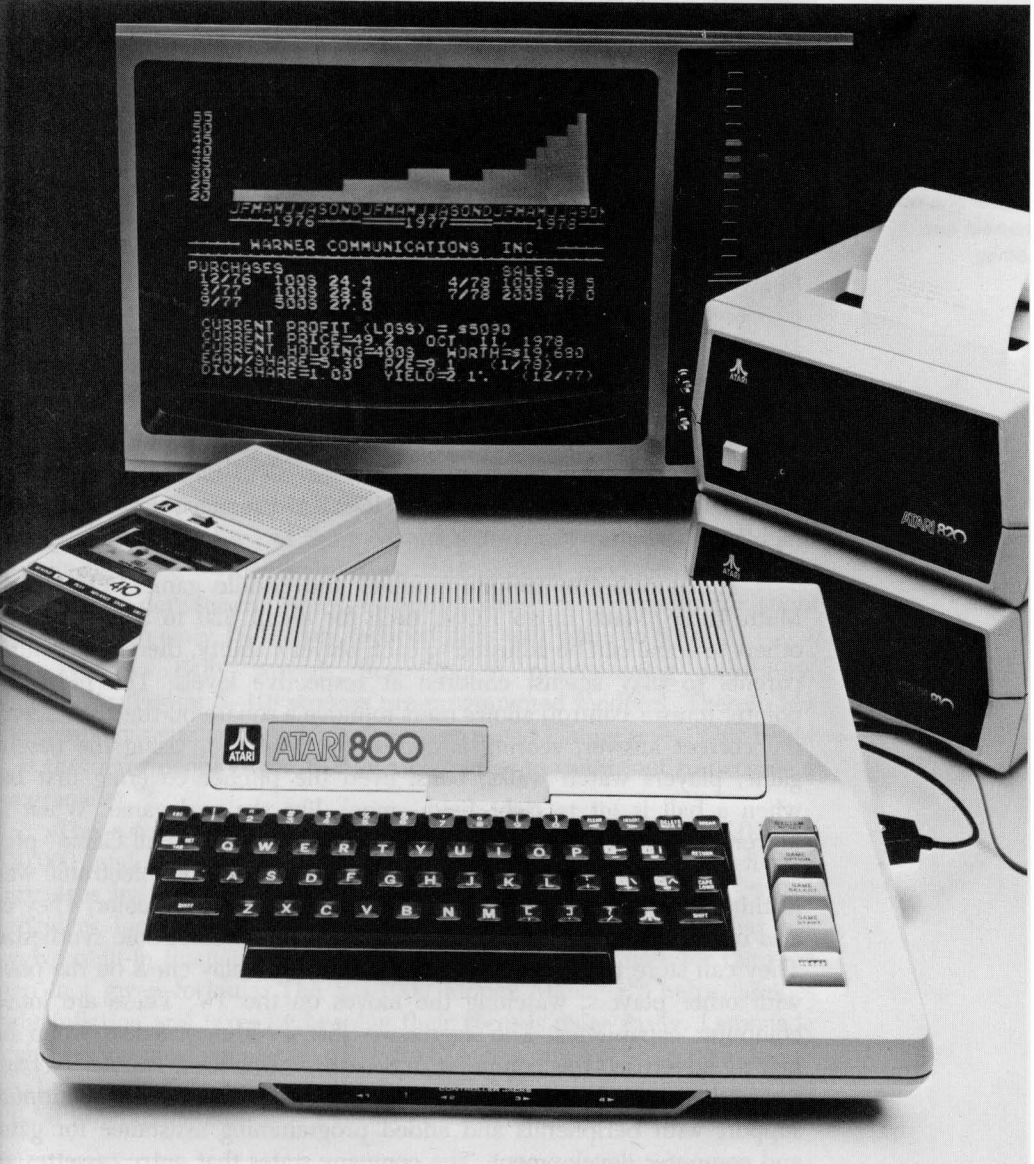
### ***Bally***

The Bally Home Library Computer (Figure 3-18), an upgrade from the Arcade version, is perhaps the best example of the crossover. Originally marketed as the game that becomes "fun and brains," this simple upgrade to a full capability computer is in itself an explanation of the crossing-over from games to computers. The Bally unit, with its powerful Z-80 microprocessor, has a 4K RAM and an 8K ROM with three built-in games. It also has built-in calculator routines that display themselves on the owner's TV from the ten-memory calculator.

Extras consist of a multi-color pen, a music-synthesizer, add-on board, two information-filing systems (one for insurance purposes, the other for phone numbers), a modem as an interface allowing Bally owners

The Atari 800™ is a personal computer that grew out of Atari's computer-controlled games. Besides offering standardized games and entertainment, it is user-programmable in Basic.

FIGURE 3-15(a)



**FIGURE 3-15(b)**

The Radio Shack TRS-80 Microcomputer System begins as a personal computer system. But a complete line of printers, disk drives, modems, and other peripherals permit expansion to fully operative business or educational systems as well.



Courtesy: Tandy

to communicate and exchange data, 16K RAM memory expansion, and high-speed printer.

Initial cassettes include baseball and paddle game ROMs and Math Table/Math Bingo ROM, each for about \$20 to \$25. These and others to come can be adjusted to each player's ability, thereby permitting parents to play against children at respective levels. The pistol game pointer (cursor control) allows users to move a square on the TV screen to the correct answer; scoring is constantly displayed. Using the baseball game, players watch walks, balls, even the pitcher covering first base when a ball is hit to right field—much like the real game. When the players run out to their positions, "Take Me Out to the Ball Game" plays.

Users can draw directly on the TV screen with an electronic wand in thirty-two different colors and in eight shades of each color. They can also compose, record, and play back music on an electronic synthesizer. They can store their personal records. They can play chess on the phone with other players, watching the moves on the TV. These are indeed computer capabilities. The aggressive JS&A National Sales Group has heavily advertised this computer in *Scientific American*, *Popular Electronics*, and many other journals and periodicals. Bally promises continuing support with peripherals and added programming assistance for game development and computer development. The company states that entry cassettes and other computer-like accessories are on the way.

**FIGURE 3-17**

*Bally's Professional Arcade features a sophisticated microprocessor unit with a four-function, ten-memory printing calculator, a full screen display, scroll button and entry correction. Hand controls are provided for one to four players. Easily attached to any TV set, it has a built-in, automatic shut-off switch to prevent burning the screen in case it is accidentally left on.*

*The local Bally service agent has an external test computer that will display problems with defective cartridges.*

*Checkmate and Gunfight, two built-in games, are played in full color on a color TV, and each game has its own distinctive music and sound effects. Characters are capable of 360° motion. Scores and playing times can be programmed. Gunfight characters can hide behind movable cacti. Strains of "Taps" and the "Funeral March" are played. Baseball teams run on and off the field with life-like running motions.*

*Optional cassettes are available with from two to four games on each Videcade (b). The Bally Action/Skill, Sports, Educational, and Strategy Series offer a variety of programming fun and learning.*

*The Arcade, with certain modifications, can also be programmed to take on home-use chores, such as checkbook balancing or other business matters. And Bally also has, since early 1978, a TINY BASIC cartridge for teaching this language, thus transforming the Arcade into a fully programmable home computer.*



Courtesy: Bally

The Bally Home Library Computer is a "smart" computer. With thirty-four integrated circuits as an internal library, it performs such tasks the timing of games, or programs, making sound effects, computing mathematical and engineering problems, creating TV art and music, and accepting typewritten series.

**FIGURE 3-18**



Courtesy: Bally

VideoBrain Computer Co.'s VB-81 Financier™ cartridge offers what a high-end financial calculator offers, but for a lot less cost. As one of its twelve complex financial formulas, VB-81 displays comparative results for up to two periods in bar graph form (shown).

**FIGURE 3-19(a)**



Courtesy: VideoBrain