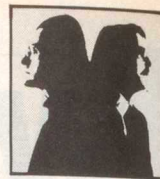# Arcade Alley

A Critical Look at Video Cartridge Games & Programs

by Bill Kunkel & Frank Laney, Jr.

Computer Cartridges

Beyond BASIC with the Atari 400

'Super Breakout,' developed for the 400, is actually a package of four games.

Home arcaders searching for exciting new worlds—and games—to conquer should thoroughly investigate the Atari 400 system. This moderately priced ($400 to $600) personal computer is certain to appeal to those who have cut their gaming teeth on programmables like Atari's own Video Computer System (VCS).

Whether purchased with the standard 4K memory or one "enhanced" to 16K, this flexible, user-friendly system provides easy access to the world of computer programming while also functioning as a state-of-the-art home arcade. Anyone who can put a plug into a socket can operate the Atari 400 right out of its shipping carton. It attaches to a TV set through an RF modulator exactly the same way video games do, and even hooking up the optional digital recorder is not likely to tax anyone's imagination.

Of course, anyone who wants to learn how to program the Atari 400 has some work and study ahead. Fortunately, the manufacturer has thoughtfully provided would-be programmers with an excellent tool in the form of "Atari Basic." This 332-page opus, included with each computer, is a relatively painless, step-by-step course in Atari's version of the most popular home-computer language, BASIC, with instructions on how to construct a variety of simple programs.

An array of four touch-sensitive buttons, lined up vertically on the console to the right of the keyboard, makes it easy to start and stop play, pick the number of participants, and choose the desired optional rules when using pre-programmed software. The Atari 400 loads prepared software in either of two modes: there's a slot for ROM cartridges—similar to the ones used with programmable video-game systems—located on top of the console, and a jack that accepts the recorder's plug for loading software on tape cassette.

Paddles and joysticks must be purchased separately. This doesn't present much of a problem, especially for those who already own an Atari VCS, since both machines use the same controllers. One of the 400's big advantages for the home

arcader is that it has four controller jacks conveniently located on the console's front panel. Not only does this set-up make connecting the controllers a lot easier, it also makes it possible for up to four gamers to wield joysticks at the same time. The manufacturer has even cleaned up a couple of trouble-spots that frequently bedeviled its video-game players in the past. The 400 sports a redesigned RF modulator and a heavier-duty AC adaptor, two little gizmos that require periodic replacement by owners of the VCS.

Now—and continuing in next issue—let's examine the first batch of prepared software Atari has produced for the 400/800 system.

Super Breakout (Atari 400/800 CX4006) is the latest and perhaps the greatest redesign of a popular ball-and-paddle contest that first reached commercial arcades several years ago. Soon after, a home version became one of the best-sellers in the Atari VCS cartridge library, attaining heights of popularity only

recently eclipsed by the CCKS version of "Space Invaders." After another run through the Atari design department, "Breakout" returned in triumph to the nation's coin-operated fun palaces in a revised, souped-up edition. The manufacturer, knowing when it has a proven winner, has done a little more tinkering and developed the deluxe "Super Breakout" for its new computers.

"Super Breakout" actually consists of four games—"Breakout," "Double," "Progressive," and "Captivity"—based on the original concept of hitting a ball with a horizontally moveable paddle to knock down bricks in a multi-tiered, varicolored wall. All four variations of this cartridge offer an infinite succession of target walls and on-screen scoring that includes both a numerical total and a comment by the computer on each player's skill, running from "Oops" to "Best."

"Progressive" is calculated to take the wind out of the sails of gamers who feel they've mastered the basic version. This

one pits players against a succession of four-tier walls that march down the playfield in a manner reminiscent of the attacking aliens in "Space Invaders." Each wall is separated from the one behind it by an empty zone four bricks deep. The speed at which the walls move down the screen is regulated by the number of times the ball hits the paddle. This makes creating a quick breakout—a passage through the wall that allows the ball to bounce around behind the wall and break bricks by the dozen instead of singly— even more critical than in the original "Breakout."

Each color brick has a different point value ranging from one to seven. As lines of bricks inch down the screen, they change color and gradually drop in value. Although bricks disappear before they reach the bottom of the screen without bonus or penalty to the player, patches of low-lying bricks pose this game's most serious hazard. Hitting the top boundary of the playfield automatically halves the size of the paddle, so it's a good idea to place shots carefully when there's a chance of this happening. It's better in the long run to waste a couple of shots by aiming at lower-level targets while the game generates another barrier of seven-point blue bricks at the top.

"Double" is much like regular "Breakout," but adds a second paddle parallel to the first and in the same vertical column. Neophytes will tend to lapse into using just the upper paddle. This is a serious mistake because it effectively shortens the playfield and makes it harder to react to rapid changes in direction of the ball's flight.

"Cavity" also uses the double paddle, but its chief attraction is the pair of extra balls that start the game trapped in recesses within the single wall. They go into active play as soon as the gamer eliminates the restraining bricks. At times, "Cavity" forces players to juggle two or even three balls at once. The best bet is to try to keep them safely imprisoned until you've achieved a breakout. With good timing, an arcader can concentrate on one ball while the other rattles around behind the wall scoring plenty of points.

Space Invaders (Atari 400/800 CX-4111) is another 400 game that will be mighty familiar to most VCS owners. The aliens attacking the moon are faster and deadlier than in the video-game version. They quick-march to a beat suggestive of jungle drums and, as an option, can fire heat-seeking missiles that cross the entire playfield in pursuit of the player's cannon.

Prior to each round, the invaders march onto the screen from doors in a giant

spaceship poised above the lunar surface on the left side of the screen. Each time the defender successfully scrags a legion of aliens, the rocket's altitude drops. If a player actually holds out long enough against the extraterrestrial onslaught to let the rocket land, play momentarily pauses. An enemy saucer swoops down to carry the defender's current cannon off to cosmic Valhalla, without penalty to the player.

Video Easel (Atari 400/800 CX4005), on the other hand, is unlike anything Atari has ever offered for its VCS machine. Players use joysticks to draw anything from simple lines to "quadratics" in which the same pattern appears in all four sections of a quartered screen. The car-
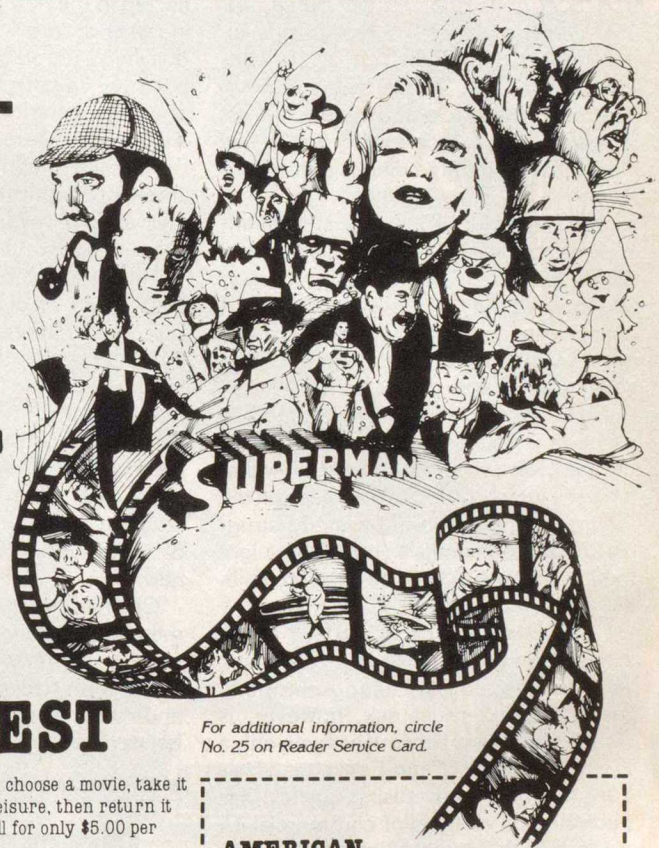
tridge's most exciting feature is that, at the mere touch of a key, the computer sequentially duplicates anything drawn on the screen to form eye-popping designs and patterns. In addition, video artists can select from among six painting modes that cover the screen with a variety of colorful shapes. The speed at which the original designs are elaborated and the hues and intensity of the colors can be easily varied with joysticks.

This kind of computer entertainment, while not a game, strictly speaking, can nonetheless provide hours of fascination. And it's so simple to use that most arcaders will astonish themselves with the designs they create the very first time they give it a try. ▼