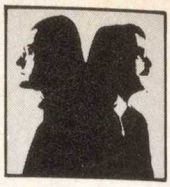
Arcade Alley

A Critical Look at Video Cartridge Games & Programs

by Bill Kunkel & Frank Laney, Jr.

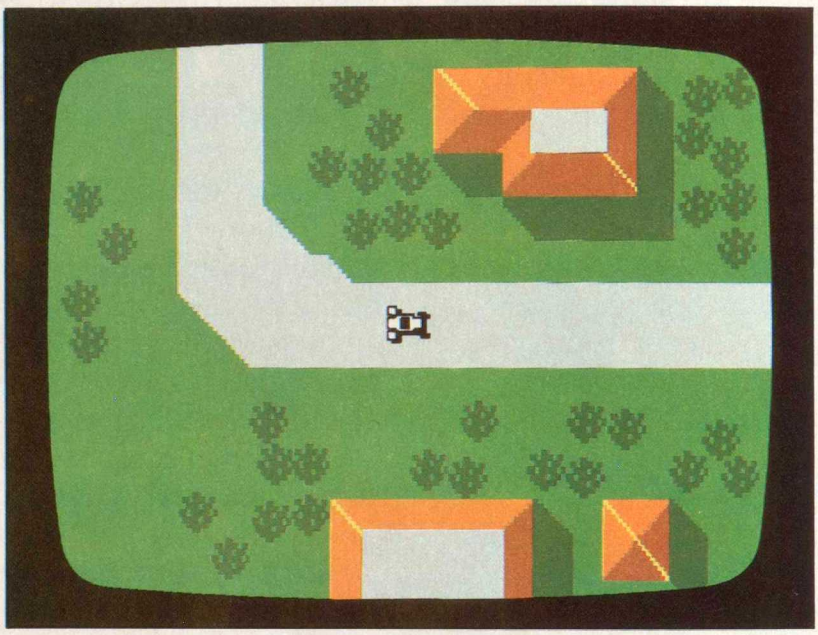


A Sports Trio from Mattel

Don't worry about that strange light shining over "Arcade Alley" this month. It's perfectly safe. It's just the rosy glow of parental pride. The team of Laney and Kunkel have become, respectively, the co-publisher/editor and executive editor of a brand-new publication called *Electronic Games*.

For arcade addicts like us, this is truly a dream come true. For the first time, there's a whole magazine exclusively devoted to the fast-growing hobby of electronic gaming. Our premiere issue is jammed with news, reviews, and features about this high-tech pastime that you won't find anywhere else. So if you like video games, commercial arcades, hand-held games, electronic stand-alones, and computer simulations, this magazine definitely belongs on your "must read" list. The first color-packed issue of *Electronic Games* is already available at your favorite newsstand. (If they don't have it, perhaps it's time you picked a new favorite, eh?) Don't risk hearing "all sold out!" from the newsstand vendor; get your copy before they're all gone.

"Arcade Alley" hasn't dedicated a complete column to Mattel's Intellivision system in quite some time. We'll redress that oversight this time with three recent releases that are likely to prove especially interesting to sports-minded arcaders.



On-screen graphics help make 'Auto Racing' the best video game produced in this genre.

Auto Racing (1113) is undeniably the best video game any manufacturer has produced about this subject so far. Even jaded arcaders who automatically turn up their noses at the mere sight of the typical race game may find this boldly innovative approach much more to their liking.

The most obvious point of difference separating Mattel's "Auto Racing" from the rest of the pack is its graphics. Not only are the five race cars—colored white, green, red, tan, and blue—rendered realistically, but so are both the track itself and surrounding scenery. The on-screen artwork is similar to what Mattel's designers used for "Armor Battle," which means that "Auto Racing" is one of the best-looking game cartridges available.

Greatly enhancing both the looks and play of the game is the unusual presentation of the playfield. Instead of showing a static overview of an entire course, the screen scrolls so that only a small stretch of the track is visible at any time. This has two benefits: it increases the effective size of the playfield and it prevents drivers from planning their route too far in advance. The latter gives "Auto Racing" a much more realistic feel, since drivers must constantly make split-second decisions.

Unfortunately, this arrangement also has one disadvantage. If one car takes a lead of more than 12 lengths over the second-place vehicle, it becomes impossible to show them on the screen simultaneously. In the two-player version of "Auto Racing," the computer automatically stops the action when this occurs, awards two points to the leader, and restarts both racers at the most recently passed checkpoint. There is of course no similar problem when one arcader is driving solo in a five-lap race against the clock. For that reason many will prefer to do most of their racing against the timer rather than head-to-head.

"Auto Racing" offers a choice of five tracks of progressively greater difficulty. Number one is essentially a speed circuit that is ideal for the less experienced, but even electronic Foyts and Anderettis will have fits negotiating the final hairpin turn on the fifth course. The game's five cars offer four different combinations of top speed, acceleration, and cornering ability. (The tan and blue cars are identical, for use when two equally skillful drivers are competing.) For example, the white car can achieve a top speed of 55 mph, but the tan and blue autos can whizz along at 90 mph.

Steering is sensitive but takes a little practice. Depressing a section of the direction disk's circumference toward the appropriate edge of the playfield sends the car in that direction. That is, the player presses the "12:00" point on the disk to send the auto due north. Drivers can make sharp or gradual turns but risk spinning out of control if they try to change direction too abruptly. Once set in motion, cars accelerate constantly. Drivers can break by pressing one of the buttons located on the side of the hand controller, and the racers slow if they wander onto the grass or into the water. The computer also exacts a time penalty after every crash.

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Video Sound

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RCA CED players. Blackmer says the discs would be compatible with all CED equipment.

Whether RCA adopts Blackmer's system or some other one or none at all, one thing is certain: the future of video will be in audio. The long-heralded synthesis of audio and video may finally be at hand.

Video Noise-Reduction Systems

Whether embedded in vinyl or transmitted over the air, most audio information is compressed. That is, low-level sound is increased and high-level sound is decreased, thus reducing the difference between the loudest and softest passages along with aural impact. As low-level sound is increased, inherent noise is increased with it, compounding a possibly inefficient signal-to-noise ratio.

Most noise-reduction systems work on a compression/expansion principle. As material is compressed, weak signals (and noise along with them) are increased. The process is reciprocal: on playback, when weak signals are reduced, the noise level—lower than the signal—is reduced more than the signal. The strong signals are compressed on recording (or encoding, as it is called) and increased on playback. In essence, the weak signals decrease and the strong signals increase, yielding a wider dynamic range and lower residual noise. Dolby circuits operate in this way, as do dbx and CX. Dolby B gives an increase in noise reduction of 10 dB above about 7000 Hz. Dolby C provides 20 dB of noise reduction over a wider range than the B circuit.

Dbx is a linear compression/expansion system. It operates over the full frequency spectrum and yields about 30 dB improvement in S/N over the entire band at the mid-frequencies. Whereas Dolby C produces 20 dB of noise reduction, dbx yields better than 40 dB. However, both dbx- and Dolby-encoded signals must be decoded to sound acceptable.

CBS's CX system is said to be compatible. That is, it is a compression/expansion system gentle enough to sound acceptable when not decoded, and very good when decoded. CX compresses only loud signals and expands them in decoded playback. On playback, the loud passages become louder and the listener can turn down the volume, thus making the soft passages softer while restoring the original dynamic balance. An undecoded disc sounds somewhat compressed, but not as substantially as one might think. Looked at another way, it gives you a good idea of how much compression goes on ordinarily. The CX system that record companies are looking at provides a 20-dB increase in noise reduction. The variants currently tested by Pioneer are said to produce about 15 dB.

The DNR is an after-the-fact device which requires no encoding and produces about 14 dB of noise reduction. Advanced Audio Systems sells it for use with LV disc players. It senses the masking ability (the ability of a program to hide background noise) and then varies the passed bandwidth accordingly. —M.P.

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Skiing (1817) gives gamers a taste of what it's like to roar down a snowy slope, minus broken limbs and wind-burn. Up to six hotdoggers can compete in either the downhill or slalom. This cartridge furnishes an acceptable range of variations, although there is only one basic trail for each event. Choosing the specific race is a four-step process:

(1) Select game speed. There are four choices ranging from exceptionally slow to normal.

(2) Indicate the number of players. One to six can participate and the computer keeps track of who does what throughout the game.

(3) Pick the degree of slope. This runs from one (gentle) to 15 (steep). The steeper the slope, the faster the speed of descent. Of course greater velocity also increases the chance of a skier careening out of control, so beginners should start with slope number four.

(4) Choose the type of race. The downhill is a speed event, while the slalom challenges players' ability to maneuver at high speeds.

Steering is fairly straightforward, a necessity in a game that depends on lightning reversals of direction. Skiers turn in a circular motion. Pushing the left edge of the direction disk sends them clockwise while pushing the right side moves them counterclockwise. On-screen skiers slow when they are heading up the slope or are perpendicular to it and gain speed when the skis point toward the bottom of the hill. Sharp turns are accomplished by pushing both the direction disk and one of the side buttons at the same time.

Moguls, outcroppings in the snow, and trees are the major obstacles facing skiers in this game. Players can glide around them with a few fancy turns or, in the case of moguls, leap over them to safety by pushing a lower-side button at the proper instant. When challenging the downhill course, gamers should avoid any movement that cuts speed. This means that each gate should be approached on a straight line, not reached by a series of short turns. The slalom, on the other hand, is a different kettle of fish. Here finesse carries the day nearly every time. Be prepared to steer back up the hill for short stretches; it's practically a necessity for the second gate, for instance.

While there's nothing breathtakingly new about Mattel "Skiing," it packs an amazing amount of detail into an easy-to-learn contest. It's equally entertaining as a solitaire game or as a three-heat tournament.

PGA Golf (1816) offers one or two duffers the opportunity to test their mettle on a nine-hole par-38 course. This cartridge stresses the putting phase of the sport a bit less than other video golf games, opting instead for a much more detailed presentation of the role of club selection.

In contrast to other golf cartridges you may have tried, it makes a considerable difference in PGA Golf whether you choose a #3 wood or a #5 iron for a particular shot. Easy-reference charts in the instruction book provide average carrying distances for long, medium, and short swings using each of the nine available clubs as a guide for arcaders who might be unfamiliar with real-life golf. While some clubs—the driver, wedge, and putter—are used only in specific situations (all explained in the rules, of course), the other six must be used at the proper time to keep scores from ballooning embarrassingly.

Although arcaders determine the general direction in which the ball is to be hit by manipulating the direction disk, the mechanics of the actual swing are handled separately. The screen displays a close-up of the golfer in the upper left-hand corner of the playfield to make this easier. The gamer presses a side button to initiate the swing and then pushes it again at the proper point during the club's arc toward the ball to produce the desired slice, hook, or straight shot.

Terrain also has a greater effect on play than in some other golf games. The ball's trajectory must be calculated when selecting a club, or tree branches may get in the way and deflect the ball. Mattel has thoughtfully furnished a chart indicating the probable path of a shot's hit with each of the available clubs.

"PGA Golf" may take a little longer than the average video game to master precisely because it includes so many novel features. Yet it is these very features that are sure to make it one of the most frequently played cartridges in any Intellivision owner's game library. V