ACTIVISION's Commodore 64 15 Pack

Contents

Introduction

Thank you for purchasing *Activision's Commodore 64 15 Pack*. We have included the following supplemental documentation to assist you with any problems you might encounter while running the program.

This document includes additional technical tips that are not available in the *15 Pack* documentation.

Outside World

Remember...
Remember staying up all night to finish that one game that had you stumped...
Remember the thrill of getting one level farther than you ever got before...
Remember the days and nights spent in front of your beloved Commodore...
And remember all those annoying interruptions!!!
Pesky little brothers; bossy older sisters; Moms; Dads; friends; alarm clocks; dates gone sour.
Just when you thought it was safe to play your favorite C64 games again, the Outside World that refused to leave you alone years ago has come back to haunt you on the *15 Pack*. For details on configuring (or turning off!) these interruptions, see the Settings section of the help file.

History of Activision: The Commodore Years

In 1979, four leading game designers -- David Crane, Larry Kaplan, Alan Miller and Bob Whitehead -- joined Jim Levy, a record industry executive, to form Activision, the world's first third-party game software company. Activision quickly became one of the largest producers for the Atari 2600 Video Computer System and enjoyed phenomenal growth, with sales skyrocketing to $60 million after its first two years. But with all its ground-breaking advances, the Atari 2600 was limited in its technology.

The next generation of game systems emerged in 1982 with the Commodore 64 (C64). The programmers at Activision were quick to recognize the graphics and sound capabilities of the C64, as well as the new horizons open to them as game designers. With 64K of RAM, expanded input through the keyboard and a disk drive to save games, developers were able to challenge a player's intellect, resulting in games with more substance. These games became the predecessors to the adventure, role-playing, sports and arcade-style games of today.

The way games were developed began to change as well. If a game for the C64 was going to shine, it was necessary for several people to work together. Programmers started to work with artists and sound engineers to polish and enhance many aspects of the game and, as a result, games took on a whole new look. Activision played a vital role in nurturing this young industry and in cultivating creative talent. Designers were given the freedom to create and were not held back by the preconceived notions of what a video game should be. This freedom will become apparent as you play through the variety of games in *Activision's Commodore 64 15 Pack*.

Alcazar
The Forgotten Fortress

General Description

The country is covered with castles and curios, with bridges and carpets that fly. And there's no way around it. Your destination is on the other side.

What perils lurk in these mysterious castles? Which path is quick and sure?

With map in hand, you'll dare across, collecting the tools you'll need. Tools to master that grandest of castles, the lure, the dream, the goal...the legendary keep, Alcazar.

Unexpected.

At every corner. With every step. You strain your eyes and ears. Through endless castles and countless chambers. Where is the jeweled throne? You search. But only find - what you least expect.

Hundreds of years ago, massive fortified palaces were built in Spain. Built to withstand the most unbearable siege. With defenses that have become, frankly, legendary.

And the grandest castle of them all was Alcazar. Said to contain the riches of a dozen rulers, folklore also whispered of fantastical demons and unimaginable peril.

Today, Alcazar still stands. Overlooking a forbidden land, it lures and tempts. The forgotten Moorish stronghold, its drawbridge down and its treasure yet untouched, dares to be awakened.

But first, even to reach its entrance, you will need to venture through a broad countryside of ancient castles. Each one harbors within its confines fire-breathing griffins, saber-swinging guards, bottomless shafts, and much more.

Through over twenty castles with hundreds of rooms, you will be driven to call upon every ounce of strength and intellect you possess. To decipher both visual and unique audio clues. To discover valuable tools. To simply – survive.

With each step you take. Look. Listen. Remember. One corner of one corridor of one castle alone may present: several doors, an annoying fly, a smudged pawprint, a flickering flame, and more.

How you react to any one of those may mean the difference between recovering riches or resurrecting a rather vicious castle inhabitant.

So, use your wits and all your senses. Get to know the items you'll encounter along the way. Commit them to memory. Tread softly. And expect the worst.

Basics

How to Start the Game
Press **F1** to start the game. If you would like to change the difficulty setting, press **F3**.

Overview
Get to know the items listed here. Commit them to memory. Tread softly. And expect the worst.

Tracks.
Discover paw prints and rest assured there's danger nearby.

Tarantula.
Very slow, but also very deadly. Exercise extreme caution when in their presence.

The Ring.
Can dispatch a genie or empower a carpet to fly you over a lake. It's a significant find.

Water!
Not the thirst-quenching variety but the kind you cast into a genie's face to do more than insult.

The Revolver.
Don't hesitate. All nasty beasts and guards fall prey to your trusty gun.

Torches.
Torches illuminate in more ways than one. Changes in color warn you to watch your step.

The Rope.

Quite handy when it comes to crossing a raging river with a broken-down bridge. Also can be used to silence a pesky fly.

Ancient Acid.

Think of it as bleach. And the best way to remove nasty oily demons from castle floors.

A Persian Carpet.

Some rugs are harmless. Others have a mind all their own and can whisk you to who-knows-where.

The Map.

Obviously you can't get where you're going unless you know where you are. Heed your map at all possible times.

Oil.

This oil is quite combustible. When tossed into the mouth of a fire-breathing demon, it's also quite effective.

The Keys.

Keys can free reinforcements but are often attached to the belts of grisly Moorish warriors.

The Fly.

Will obscure all audible warnings until you silence its annoying drone.

The Task At Hand

You are an explorer moving through a countryside of castles, en route to Alcazar. Along the way, you must gather the implements needed for a successful journey. Your goal is to enter Alcazar, find your way to its crown room and reach its fabled throne - but not while a demon is chasing you.

Getting Started

To select the difficulty level, press the F3 key until the level you wish to play is displayed.

Level 1 – Beginner   **Level 3** – Advanced
Level 2 – Intermediate   **Level 4** – Expert

To begin the adventure, press **F1** after selecting difficulty level.

To play the same difficulty level after an adventure has ended, press **F5**.

To play a different difficulty level after an adventure has ended, press **F7**.

To pause the adventure at any time, press the **Pause** button. To resume the action, press it again.

Alcazar has a built-in screen saver, which will black out the game if you press the **Down** cursor key. To resume playing, press the **Down** cursor key again.

If none of the controls are activated for some time, your screen will black out. Press the **End** key to resume the adventure.

Pathways to Adventure

The first thing you'll see is a large **strategy map**. It displays a countryside dotted with castles connected by paths. Your explorer is represented on the map as a flashing dot. You'll enter the country on the left side and move toward Alcazar, the largest castle, on the right. Plan your route wisely. This map changes with each new game and can be referred to often.

The first thing you'll do is move the white dot on the map screen into one of the castles. You will immediately see your explorer standing in the corridor of that castle. Now, you can move through the castle finding tools and fighting demons.

Controls

To move your explorer, move joystick left, right, forward, or back.

To pick up an item, simply walk over it. If you walk over an object while your hand and pockets are full, the new object will be switched with the object in your hand. If you don't want the new object, just repeat the process.

To switch things from pocket to hand, press and release the joystick button.

To refer to the large map, press and **hold** the joystick button. (This won't work when a demon is on screen.)

To throw or fire an item in your hand, press and hold the joystick button then move the joystick in the desired direction. To fire multiple shots, move the joystick repeatedly in the desired direction.

Castles

All castles are two stories high, except for Alcazar, which has three stories.

To enter a castle, simply follow a pathway which leads into it.

Upon entering, the screen displays a top-down view of the room you've just stepped into. It changes as you move from room to room.

The three squares at the top left of the screen display the contents of **your pockets**; to their right,

a fourth square displays what you are holding in **your hand**.

The line-up at the upper right represents the number of **explorers in reserve**; the explorer at the extreme right of this line-up represents the one currently in use. The number at the lower left displays the number of **doorways you've passed through**.

After you've defeated the first required demon, a small map of the castle you are in appears at screen bottom. The square on the left represents the first floor, the square on the right represents the second; the blinking blue circle shows where you are in the castle, and the rooms you've entered are shown in white.

Shortcuts to Alcazar can be used only if you have certain implements: A raft is required to cross **the lake**; a ring is required to use either of the two **flying carpets** (represented by a white square to the left of a black square); a rope is required to cross either of the two **broken bridges** (represented by a suspension-like bridge broken in half). If you possess the required object, just touching a shortcut will set it into motion.

Contents of Castles

The contents of a castle are indicated by its color. Its most sought-after object (underlined below) is always guarded by that castle's major demon (also underlined). Guns, oil, water, bleach, and raw meat are scattered randomly throughout the castles. However, they will be in larger supply in the castles mentioned below.

NOTE: Audible clues are not immediately heard while you are moving. Thus, it is advisable to stop for a moment upon entering a room, in order to hear the warning sounds as soon as possible.

Another warning: Your relative health is indicated by the color of the explorer's hair. Black is healthy, light red is injured, purple is critical and red means you're close to 'extinction'. Another few bites from a demon and you've had it. **Renew your strength by leaving the castle!**

Another defense: The raw meat scattered about is laced with tranquilizers. All demons (except flies) will be stunned for ten seconds when you toss them this handy between-meal snack. Tigers, however, will not take the raw meat while they are chasing you. Hence, you must toss it to them from an adjoining room.

More about demons. All demons (except flies and tarantulas) will lie in wait until they see or hear you. Shooting a gun, bumping into a genie jar, or using your keys will attract the demons in adjacent rooms. If a demon is chasing you, try to leave a room before he enters it. Doing so will end the chase. Demons will return to a castle when you enter any other castle, but the useful objects are never restocked during a game.

Castle Color	Contents	Demons
Blue	rope, guns	tigers, griffin, tarantulas, flies
Purple	ring, oil	oilmoebas, guard, tarantulas, flies
Red	raft, water	griffins, genie, tarantulas, flies
Black	extra explorer in dungeon	guards, tiger, oilmoeba, tarantulas, flies
Alcazar	throne in crown room	genies, tiger, oilmoeba, griffin, tarantulas, flies

Visual and audible warnings are given when danger is nearby. Avoid a confrontation or gather the proper defense.

Demons & Dangers	Warning	Defense
Tiger	paw prints on the floor	three bullets
griffin	raspy breathing sound	oil or six bullets
Oilmoeba	black slime on the floor	bleach or five bullets
guard	tinkling sound of keys	four bullets
genie	genie jar on floor	water or 6 bullets or ring
Tarantula	no warning, but are slow	one bullet or the raft
Flies	loud buzzing sound (obscures other audible warnings!)	one bullet or the rope
bottomless shaft	very dark flames on wall torches	do not enter

Dungeons, shafts, and Persian rugs. Dungeons are found in the black castle and in Alcazar. They can be entered through a hallway or a locked gate (the latter requiring a set of keys in your hand). Once inside a dungeon, rescue the explorer by touching him, and receive an extra life.

Bottomless shafts are scattered throughout the castles. Falls therein are fatal. Bottomless pits are smaller and, if you're careful, you can walk around them.

Persian rugs are also scattered about. Some are harmless, while others are deranged flying carpets that will whisk you (or a demon) to a random room in the same castle. Additionally, **a floor-sized flying carpet** lies in every castle without a dungeon or crown room. Since it covers the entire floor, all visual warnings are also covered. You can tip-toe around this carpet. Flying carpets will never drop you into a shaft but they may deposit you inside a dungeon or into a room with a demon.

Difficulty Levels

Level 1 - Beginner. Start with five explorers and three guns. No raw meat, small pits or rafts in castles. Dungeon keys are obtained from guards or genies. Castle floor plans appear upon destroying the first demon.

Level 2 - Intermediate. Start with four explorers and two guns. No raw meat or small pits. Dungeon keys are obtained from guards or genies. Floor plans appear upon destroying the first demon.

Level 3 - Advanced. Start with two explorers and one gun. All items present. Dungeon keys are obtained from guards only. Floor plans appear after destroying a guard or genie.

Level 4 - Expert. Start with one explorer and one gun. All items present. Dungeon keys are obtained from guards only. Floor plans appear after destroying a genie. Fewer guns and one additional major demon are in each castle.

Demons move faster at the higher difficulty levels.

A Final, Important Fact

You can effectively shoot or throw things into adjoining rooms. If you think a demon is in the next room, you needn't risk your life by entering it! Just fire the required defense through the door, and you will hit the demon. This works just dandy if you're using a one-piece defense. However, if you are firing a **series** of bullets into an adjoining room, be prepared: While you're shooting, the demon will run out, into your room. So, stand against the farthest wall and shoot quickly.

Words to the Wise

To succeed, you must be able to predict which rooms contain demons. The best method is to draw two floor plan maps - one for the small castles (all basically the same) and one for Alcazar. Become adept at correlating these floor plans with the warning signs you see and hear along the way.

Learn how to give demons the shaft! You can stand on the farthest edge of a bottomless shaft and shoot into the adjoining room. When the demon runs out toward you, he'll fall to the depths. It's a great move when you're down to one bullet. (Unfortunately a guard will take his keys with him.) Demons can also be tricked onto flying carpets, though you won't know where they'll turn up later. Neither of these tricks works with genies, flies, or tarantulas (they'll fly up or spin a web).

Plan ahead! Know where you're going and carry only what you'll need. Enter Alcazar with a bucket of water to survive the first genie and, in level 3 and 4, bring keys, too, since there are no guards in Alcazar.

Use the strategy map to note where a castle's entrances/exits are. Remember that some are on the first floor and some are on the second.

Keyboard
If you use the keyboard rather than a joystick, you can use the Game Options screen to choose which keys you wish to assign as up, down, left, right and the joystick button.

Joystick
Move your character up, down, left, right or diagonally using the joystick. The weapons and ammunition you are carrying are shown in the yellow boxes along the top of the screen. The weapon you are currently holding is in the rightmost box. To cycle through weapons, press the joystick button. To fire (or throw) the current weapon, hold the joystick button and move the joystick in the direction you wish to fire.

Scoring
To win, you must reach Alcazar's Jeweled Throne while there are no enemies following you. There are no points for "almost winning."

Hints

Tom Loughry, Designer and Programmer

"I like to use magic carpets to get rid of creatures. The idea is this: stand on one side of the room, across from the critter, and fire your gun to get its attention. When it comes to attack you, it walks across the carpet and - presto - no more creature!"

"You can also tiptoe into the rooms with bottomless pits and do the same. The problem with this is that genies, of course, don't die in the pit, so you have to be careful. Use the location of jars as your clue for the genies."

"Another use of the carpets is if you get 'blocked' - that is, if you don't have enough bullets and your path is covered with critters. You can use a magic carpet to take you back to try again. The problem is that sometimes it zaps you into a room with a genie – OOPS."

Game History

Tom Loughry, Designer and Programmer

"The idea [for Alcazar was to write a] puzzle game with bursts of very rapid action. You'd need to consider what your options were - and there are a lot of clues in this game. If you're careful, you can know what's in the next room even before you enter. The goal is to consider what your plan of action is and then do it in a flurry of activity. Personally, I always preferred the puzzle aspects to action in most of my games. If you were cautious, you could always solve the puzzle."

"What I wanted to achieve in Alcazar was the connectivity and maze characteristics of a multiplicity of rooms, and a castle environment fit that requirement. From that start, you derive the hazards and meanies. So the environment came from the design element of a puzzle/fighting/maze game."

"I often used a mix of audio and video clues in my games. It's easy to rush into things with visual clues, but with audio, you need to physically stop and listen." Another great example of this in one of Tom's games was "Advanced Dungeons & Dragons for the Intellivision. That was my game. Again, it really stressed audible as well as visible cues."

"In fact, the intense activity is one of the reasons I didn't do Beamrider - Dave [Rolfe] did. I can enjoy both styles - action and puzzle - but I prefer the puzzles. I also did a game called The Dreadnaught Factor, which is an action-oriented game. But when I play Dreadnaught, I prefer to plan where I want to be and what I want to accomplish on this pass before I launch into it. Then I can blaze a path with that goal in mind - either to accomplish some task or to set myself up for the next pass. The thing was that Beamrider and Dreadnaught Factor were both ready to be programmed at the same time, and Dave and I had to decide who was going to do which. I liked Dreadnaught a little more, so I did that one, and Dave liked Beamrider, so he did that one."

"The best way to do game design is to do at least six designs for every game you plan on doing. Each design was individual so it wasn't like we'd just pick the elements we liked from each one and come up with the final product. Not every game you think of is a good one, so you pick the best idea to actually do. Then, when that game is done, you usually do a whole different design or crystallization, rather than just using the designs you had already done."

Although one-person development teams were becoming less and less common during the time period, Tom "did the audio, the graphics - everything. Alcazar was originally meant for the Colecovision. The Colecovision had 16 K on their cartridges. When I ported it to the Commodore, I didn't add too much. I believe it ended up being about 18 K on the C64. I think the entire port took about 2 months."

Tom recently completed work on PGA Tour Golf for Electronic Arts. He is currently working on a brand new game design for EA, which Tom informs us "is something like the 17th product of my career. I lost count a while back...".

Troubleshooting Alcazar

How to Start the Game

Press **F1** to start the game. If you would like to change the difficulty setting press **F3**.

Beamrider

General Description

Dark. Dangerous. Demanding.

A beam matrix of iridescent blue engulfs the distant blackness of EarthSpace. You stand watching. First

mesmerized, you now realize the beams carry weapons. Frightening creations in endless configurations. Intriguing to watch, but will you - yes you, dear reader - take action? You will??!! Then roll up your sleeves, mount these beams, and...ride!!!

Animated graphics create a 3-D perspective that virtually pulls you into the screen. Pulsating sound effects intensify the constant array of new objects that zip from beam to beam. Beamrider combines tomorrow's technology with designer Dave Rolfe's fantastic imagination to forge the challenge you'll return to again and again!

The Restrictor Shield, 99 sectors deep, now surrounds the Earth. You are the Beamrider, on a mission to clear the Shield. There you must demolish an onslaught of alien frights as you dodge from beam to beam. Sector after sector, the deluge deepens...

Award Winning!

Winner - 1983 "Video Review" Magazine Computer Game of the Year

Beamrider won the 1984 ViRA Best Computer Game award for the year 1983. The ViRA is an award given out by Video Review magazine for the most ground-breaking product in a field. Beamrider's three-dimensional graphics were extremely realistic for the time, resulting in a game that was as much fun to watch as it was to play.

Basics

How to Start

Select number of players by pressing the appropriate number, 1-4, on the keyboard.

Select level of difficulty by pressing its corresponding number on the keyboard:
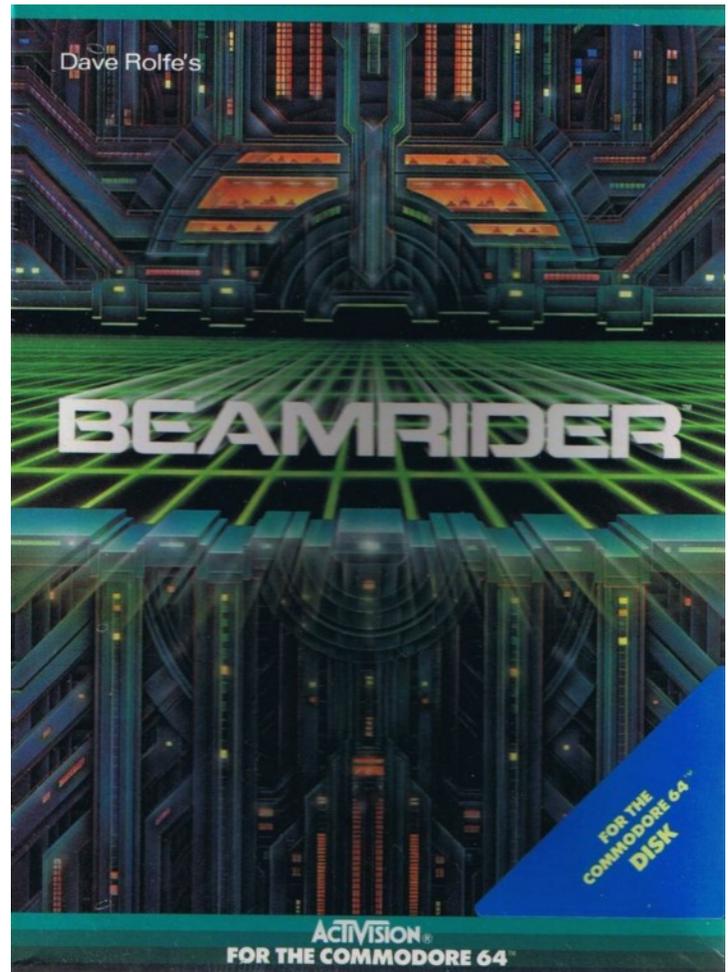
Level	Begins at Sector
1	1
2	5
3	10

You will immediately be in the Space Station. Its control panel displays your score, two reserve ships, the sector number, the number of enemy saucers in the sector, and three torpedoes.

To start the action, move the joystick in any direction. The hatch doors will open, thrusting you through hyperspace to the Restrictor Shield.

Beam Basics

The Space Station. Whenever your ship is destroyed or when you complete a sector, you will return via hyperspace to the space station. When you're ready to continue, push the Joystick in any direction. The hatch doors will open and you'll be on your way.

Enemy Saucers. There are 15 white enemy saucers in each sector. They all must be destroyed before you can go to the next sector. Every time a saucer is hit, the number in the upper left corner of the screen will count down by one.

The Sector Sentinel. When all 15 enemy saucers have been destroyed in a sector, their Sentinel ship will cruise across the top of the beams. Only a torpedo can destroy it.

Weapons. Laser lariats are only effective against certain invaders. (See Dangerous Encounters, below). Torpedoes, however, will destroy the first object they meet on a beam. You are only given three torpedoes per sector! Use them sparingly since they are your only weapon against the Sector Sentinel.

Yellow Rejuvenators. Occasionally, yellow rejuvenators will float through the beam matrix. Allow them to land on your deck, as each connection will add a bonus ship to your fleet. If you shoot a rejuvenator by mistake, it will turn red from the heated blast. Get out of the way! The wreckage will destroy you on contact. A torpedo will completely destroy a Yellow Rejuvenator.

Dangerous Encounters

With the first swing of your laser lariat, the white enemy saucers approach. But there's more. As you progress through the Restrictor Shield, a sinister collection of aliens will materialize. A new danger is added with every other sector, up to sector 14:

Sector	Craft	Vulnerable
1	White Enemy Saucers	Yes
2	Brown Space Debris	No
4	Yellow Chirper Ships	Yes
6	Green Blocker Ships	No
7	Green Bounce Craft	No
10	Blue Chargers	Yes
12	Orange Trackers	No
14	Red Zig Bombs	Yes

Only "vulnerable" objects are affected by laser lariats (Saucers and Chirper are destroyed, Chargers and Zig Bombs are deflected.) Everything else can only be dodged, or, in extreme cases, torpedoed.

Keyboard

Function Key	Description
F1	Begin new game with same difficulty and number of players.

The keyboard can be made to act as a joystick. See the Game Options section for help on configuring your keyboard for use as a joystick.

The following keys are used in this game, and should not be reassigned to the joystick functions:

The **1**, **2**, **3**, and **4** keys are used to select the number of players and starting difficulty level.

To drop out of a multi-player game without interrupting the other players, press **Q** on the keyboard when your turn begins. Your score will be omitted and the sequence of play will be adjusted for the remaining players.

To begin a new game when the current one is over, press **F1**. Beamrider will replay at your previously selected difficulty level and number of players.

To begin a new game at any time at a different difficulty level or number of players, select **Restart Game** from the **File** menu.

Joystick

Your Light Ship follows the left and right movement of the Joystick.

To fire laser lariats, press the joystick button.

To fire torpedoes, push the Joystick forward.

Hints

Dave Rolfe, programmer of Beamrider

Greetings from sector 26 and moving! If you want to make it to the outer sectors, pay attention to these tips.

Maintain precise control of your Light Ship by learning to TAP the Joystick to move your ship a single beam at a time. And stay near the center beams so you won't get boxed into a corner with nowhere to run. Zap the white enemy saucers as early in their approach as possible. And check this out: You can hit them when they're slightly off the beam, before they can drop their missiles.

When you see a yellow rejuvenator, don't abandon all caution as you move to catch it or

you'll likely wreck your ship. If an enemy object is blocking the rejuvenator, you can use a torpedo to blast it out of the way. Then, catch the rejuvenator. But remember, you only have three torpedoes, and they're your only weapon against the Sector Sentinel.

And while we're on the subject, when the Sentinel is about to approach, don't sit on the beam you plan to shoot from. Green Blockers will swarm onto it immediately! Instead, wait on a beam you're NOT going to shoot from (like the one nearest the Sentinel's first sighting). As soon as the Blockers are 'locked' onto that beam, zip over to an unblocked beam and torpedo the ship.

Last but not least, take time to notice the enemy attack movements. They follow motion patterns that allow you to anticipate many of their moves.

Game History

Dave Rolfe, Programmer

The burden falls upon the survivors to tell this tale of the old days. This was an era of 8-bit processors with 1- or 2-megahertz clocks, and graphics systems so primitive that in some cases the computer had to actually guide the scan down your television screen, line by line. These were game machines that had perhaps 128 or 256 bytes of scratch RAM, and could accept a program ROM cartridge of no more than 4 or 8 thousand bytes. The challenge, in those bygone days, was to use those primitive tools as a platform to create something fun and interesting and maybe a little bit complicated. Into this world was born Beamrider.

My name is Dave Rolfe, and I was the primary developer of Beamrider. I'm writing to give you a short history of Beamrider and me (the two are, of course, inseparable). I made the transition from amateur software designer to professional software designer in 1977, when I graduated from Caltech. Being a professional is desirable, because it means that people pay you money, in theory if not in practice. After graduating, I worked for a couple of tiny little companies. You can make a difference at a small company, instead of being just another cog in a large machine - but be warned that working for a tiny little company sometimes pushes the monetary rewards back into the realm of the theoretical. It turned out that this company where I worked was asked to help Mattel build some games for a new game unit. So I visited Mattel and found that their hardware was impressive (for that time), but the software was non-existent. And so I proceeded to develop, from scratch, the protocols and software environment and initial line of games to support what would eventually become the Mattel Intellivision.

Between the late 1970's and the mid-1980's, I worked in many areas of game development. After setting up the basic method of Intellivision game design, and writing the Intellivision operating system (the "Exec"), I went on to create four other Intellivision game cartridges and to supervise other apprentice game programmers. I also programmed games for other platforms, including the Atari 2600 and Colecovision, and some of my games were ported to still other game machines. I developed small games, such as prototypes for the Mattel handheld units, and big games, including two arcade games, "Star Fire" and "Fire One". ("Star Fire", released in 1979, was the first arcade game to maintain a high score table which accepted and displayed the name of the winning player. Sometimes I wonder whether this might be my personal contribution to our planet's culture. Not exactly on the level of world peace, but I suppose it's something.)

The funny thing is, despite all of the game work I've done, I have never thought of myself a "game person". I am a computer person at heart, and I see games as merely something you can do with a computer. So in the Beamrider days, I was very grateful to be working with Tom Loughry, who is the best game person I've ever known. You'll find Tom's personal history of Beamrider somewhere nearby. It was Tom who came up with the original inspiration for Beamrider, and I'd run screaming to him whenever I needed to kick around a development question about what was "fun".

And there were many questions as the game of Beamrider was fleshed out. First the basic game scenario was created: There was a moving matrix of beams with a 3-D perspective. The player controlled his base unit on the bottom (near side) of the screen. The enemy spacecraft appeared at the top (distant side) and then scurried towards the player while dodging left or right across the beams. With that structure in place, the tweaking began. A good strategic balance between the player and the enemy had to be decided upon. How much freedom of motion should the player have? How fast should the enemies move to attack? At what point does the player feel challenged, and at what point is the challenge overwhelming?

In an initial version of Beamrider, the player ship

was flanked by two pods, one on each side, effectively making the player 3 beams wide. We thought it would be satisfying to control a big ship, but it turned out that it was a sitting duck for enemy fire. We decided to change to the smaller and more maneuverable craft that you find in the released game. There was also much focus on how the enemy craft would attack the player. Tom advocated fixed attack patterns, which would allow the player to watch the enemy and get some sense for the general shape of what he might do next. I favored dynamic computer-generated attack sequences, but experiments upheld Tom's view. In essence, the fixed attack patterns gave the enemy a veneer of intelligence, while simultaneously allowing the player to learn about the smart enemy and then outsmart him. So I spent countless hours developing a series of attack patterns, and then rating and sorting them, so as to present them to the player starting with the easier attacks, and later (if he or she survived), serving up the more vicious stuff.

Then I had to invent the other nasties that would show up as the game progressed, just to make life more interesting for the player. First there are the straightforward traps, such as rocks that would simply fall and could be easily dodged. Then we move on to a series of trickier pitfalls, such as Bounce Bombs (which bounce along the beams) and Trackers (which try very hard to fall right on the player) and finally Zig Bombs (which zig (or zag) in such a way as to make the player dodge and then, just when it appears the bomb has been sidestepped, dodge again). Those Zig Bombs could be quite nasty until you got the hang of them!

When Beamrider was originally released, customers were encouraged to join the Activision "Beamriders". If a player scored 40,000 points or more and reached at least sector 14, he or she could send in a picture of the TV screen showing the score and receive an official emblem like the one shown above. Photos and letters poured in to Activision, and I liked to read these when I visited the main office. I recall one thankful letter from a man telling of how he had conquered Beamrider and the next day he went in to work and was promoted. There was, it would seem, a connection between these two events, and I sincerely hope that you will have a similar experience when you master the game.

NOTE: I'm sorry, but they tell me that the offer to join the Beamriders is no longer valid! The charter Beamriders have, like a well-known starship captain, been retired. There is as yet no next generation, so please do not send correspondence regarding this offer. At this point in time, you can only become an unofficial Beamrider-in-exile.

Since the late 1980's, I have worked as a freelance consultant developing software for the IBM PC world. I was a principle programmer for Lotus HAL and Lotus Magellan, and I helped move Lotus 1-2-3 into the graphical era. I have also consulted for Stac Electronics, updating portions of their Stacker disk compression software for the Windows and Windows 95 environments. I'm pleased to report that I am still breathing and ambulatory as of this writing, and I invite you to visit my web page at:

http://www.alumni.caltech.edu/~drolfe/

I hope you have enjoyed this little lesson in history. See you on the beams!

Tom Loughry – Designer

"When we first started Cheshire, we had rented office space to get set up. [Ed. Note: see above for more on Cheshire Engineering.] We had rented this large office space that was all open, and eventually we were going to put up walls and build cubicles. Before we could get the cubes built, though, I was designing games."

"We had this idea for a game called Beamrider, but all we had when we moved into this office space was that it would be on beams. We didn't know at the time what it would look like, or what the gameplay would be."

"One day, I was rolling back and forth in my chair looking up at the ceiling, and I noticed the patterns that the ceiling tile was making and how it looked as I rolled back and forth under it. I used this to help me visualize the gameplay for Beamrider."

When asked about why he would imagine things coming down the beams at him, Tom recalled: "A possible inspiration might have been the 6 inch potato bugs that were infesting the majority of Pasadena at the time, and were sharing office space with us for a little while."

Tom recently completed working on PGA Tour Golf for Electronic Arts. He is currently working on a brand new game design for EA, which Tom informs us "is something like the 17th product of my career. I lost count a while back..."

Troubleshooting Beamrider

How to Start

Press **1**, **2**, **3**, or **4** for the number of players.
Press **1**, **2**, or **3** for the difficulty level.
Press the controller in any direction to launch into the game.

Beamrider Game Specific Notes

You may notice that Beamrider plays slower on higher levels. As you progress through Beamrider, the number of objects that must be drawn on the screen increases. This requires more of the emulators time and your computers processing power. As a result, gameplay may slow considerably. You can fix this by turning the **Animation** bar in the **Game Options** section under the **Settings** menu towards **Fastest** (Win95 Troubleshooting Pg 52+).

This will improve your game speed. However, in order to increase the rate at which it refreshes the screen, the emulator does not draw a percentage of the frames. This may result in animation flickering and collision problems, especially when you have it set all the way to **Fastest**. Try to find a place on the slider bar where you have good game speed with as little flicker as possible. *15 Pack* saves the preferences you set for each game so you won't have to reset them every time you play.

Decathlon

General Description

"If it's just a game, why am I so out of breath?"

Because of ten very physical events. And two on-screen contestants who will bend your biceps and trigger your adrenaline. When the competition begins, you'll see.

And feel.

Basics

How to Start

Press **1**, **2**, **3**, or **4** for the number of players. In multi-player mode, the first and third decathletes compete against the computer. Single players always compete against the computer.

Press **S** or **A** for Single Event or All Events

In Single Event press **1 - 0** to pick your event. Press **F7** to return to menu.

In All Events press the joystick button to advance to the next event once the current event ends.

Single Event Play

If **S** is selected, a menu appears. Press the keyboard number corresponding to the event in which you wish to compete.

After completing an event, press the joystick button to repeat that event, or **F7** to return to the menu.

All Event Play

If **A** is selected, press the joystick button to advance to next event once current event ends.
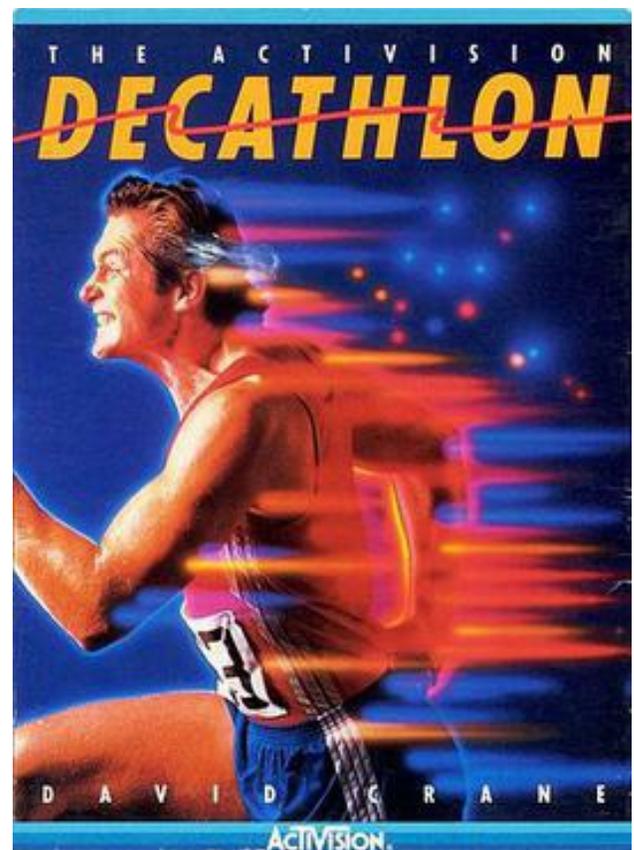
To return to initial selection screen, select **Restart Game** from the **File** menu.

Special Highlights

Strength Bar

Registers your relative running or approach speed throughout each event. The faster you move, the closer the bar moves to the right-hand limit.

Real-Time Clock

Counts the minutes, seconds, and fractions of seconds during all races.

Scratch Line

Don't cross the scratch line before pressing the joystick button for appropriate events. (See "Events", below)

Distance Measure

Distance is measured on-screen in meters for appropriate events.

Current Contestant

The number 1, 2, 3, or 4 appears directly next to the strength bars to remind contestants which decathlete is competing.

Events

100 - Meter Dash

One opportunity. The quicker your time, the higher your points.

Long Jump

Three attempts allowed. Begin with a 30-meter running start, then press the joystick button just before you reach the scratch line.

Shotput

Three attempts allowed. Move as quickly as you can to the scratch line, then press the joystick button.

High Jump

Allowed a maximum of three attempts at each height. Run the 30-meter approach, then press the joystick button to jump. Successfully "clear" a height and the crossbar raises.

400-Meter Race

One opportunity. A middle-distance race.

110-Meter Hurdles

The hurdles are at 10-meter intervals. You won't be disqualified for "spilling" a hurdle, but it will slow you down. Press the joystick button to jump the hurdle.

Discus

Three attempts allowed. Approach the scratch line as quickly as possible, then press the joystick button.

Pole Vault

Allowed a maximum of three attempts at each height. Run to the vault pit and plant your pole by pressing the joystick button. Continue to move the joystick as you vault, and, at the peak, press the joystick button again to release the pole. Successfully clear a height and the crossbar raises.

Javelin

Three attempts allowed. Run to the scratch line, then press the joystick button.

1500 - Meter Race

One chance in this final event. Pace yourself, then, give it your all!

Women's Heptathlon

Women compete in a 7-event Heptathlon, rather then the 10-event men's decathlon. A 200-meter race is run instead of the 100-meter dash, a 100-meter hurdles is run in lieu of the 110-meter hurdles, and an 800-meter race is run instead of the 1,500-meter race. Also, the women do not compete in the pole vault, javelin, or run the 400-meter race.

Current World Records

See how you compare to these world records. (As of 8/9/95)

Men's Decathlon

Event	Record	Holder	Year
100-Meter Dash	9.85 Sec	Leroy Burrell	1994
Long Jump	8.95 m	Mike Powell	1991
Shotput	23.12 m	Randy Bames	1990
High Jump	2.45 m	Javier Sotomayor	1993
400-Meter Race	43.29 Sec	Butch Reynolds	1988
110-Meter Hurdles	12.91 Sec	Colin Jackson	1993
Discus	74.07 m	Jurgen Schult	1986
Pole Vault	6.14 m	Sergel Bubka	1994
Javelin	95.66 m	Jan Zelezny	1993
1500-Meter Race	3:27.37	Noureddine Morcell	1995
Overall Points:	**8,891**	**Dan O'Brien**	**1992**

Keyboard

Function Key	Description
F7	Return to menu during Single Event Play

The keyboard can be used to act as a joystick. See the Game Options section for more information on configuring your keyboard for use as a joystick.

Event	Record	Holder	Year
200-Meter Dash	21.34 Sec	Florence Griffith Joyner	1988
Long Jump	7.52 m	Galina Chistyakova	1988
Shotput	22.63 m	Natalya Lisovskaya	1987
High Jump	2.09 m	Stefka Kostadinova	1987
100-Meter Hurdles	12.21 Sec	Yordanka Donkova	1988
Discus	76.81 m	Gabriele Reinsch	1988
800-Meter Race	1:53.28	Jamila Kratochvilova	1983
Overall Points:	**7,291**	**Jackie Joyner-Kersee**	**1988**

Gold
10,000 pts

Silver
9,000 pts

Bronze
8,600 pts

The following keys are used in this game, and should not be reassigned to the joystick functions:

−The numeric keys **1** through **0** are used to select the number of players and specify which single event to play.

−The **A** and **S** keys are used to select All Events or Single Event.

Joystick

Rapidly move joystick to the left and right to run or approach the scratch line. Press the joystick button to jump or throw. See <u>Events</u> for more information on how to play each event.

Scoring

Earn points for each event. Screen displays event score following each attempt, and total score after each event.

Score 1,000 points during any attempt, and a musical tribute will be your reward. Only the highest event score is added to your total.

Hints

You might try holding the joystick differently to see which way is the easiest for you to get speed and power.

In the long jump, shot put, javelin, and discus events, try to get a good first score, then really push yourself on the next two attempts. Since you already have a score, there is no chance of scoring zero points.

In the 1500-meter race, you do not need to run at top speed for the first 1300 meters. Pace yourself and only move the joystick or tap the keyboard as fast as necessary to keep yourself at the top speed allowed for that part of the race.

Game History

David Crane, Designer and Programmer

"The idea for Decathlon was to have a video game that people could actually work up a sweat playing - it was meant to be different than what people normally associated with 'video game'. The 'wiggle' joystick interface game was fairly unique at the time, too. We made it so that you really had to work to get your athlete to move." Anyone who's tried finishing "All events" will certainly testify that you can work up a sweat quite easily playing Decathlon!

The Commodore 64 version was essentially the same game as the Atari 2600 version, with improved graphics and sound.

In addition to **Decathlon**, David Crane also worked on **Little Computer People Project** and **Pitfall**. He is still working in the computer game industry for a company he co-founded called Absolute Entertainment.

When Decathlon was originally released, consumers had the ability to join the "Club of

Champions". A score of 8,600 to 8,999 earned a Bronze medal, 9,000 to 9,999 earned a Silver Medal, and 10,000 or more won you the prestigious Gold Medal. (Colors may vary.)

NOTE: This offer is no longer valid! Please do not send correspondence regarding this offer.

Troubleshooting Decathlon

How to Start

Press **1**, **2**, **3**, or **4** for the number of players. In multi-player mode, the first and third decathletes compete against the computer. Single players always compete against the computer.

Press **S** or **A** for Single Event or All Events

In Single Event press **1 - 0** to pick your event. Press **F7** to return to menu.

In All Events press the joystick button to advance to the next event once the current event ends.

Decathlon Game Specific Notes

When the game is played at faster animation settings, the rate at which you push the keys on the keyboard might not seem to affect the speed at which your player is running. The closer you set the animation to **Smoothest**, the better. You can also improve this situation by using a joystick (the original game on the Commodore 64 used a joystick; by using one you are simulating the action of the original game).

Other problems you may encounter when you set the **Animation** bar to **Fastest** are that your player is able to run through the high jump bar, pass through the bar in pole vault, etc. This again is due to the emulator not drawing frames in order to speed up the animation. Set the **Animation** bar in the **Game Options** section under the **Settings** menu toward **Smoothest** to resolve this problem.

If you want to play two players with joysticks, you are going to need two joystick ports in your computer. If you don't have two game ports; then one player must use the joystick, and the other must use the keyboard.

To try to improve your speed you can also see *Game Too Slow* in Win95 Troubleshooting below (Pg 52+).

The Great American Cross Country Road Race

General Description

From sea to shining sea, the race is on! Rally across the nation in high gear in any of four cross-country challenges.

Mind you, it'll take a lot more than just good driving. You'll need to select the race, map out the best route, check road and weather conditions, look out for speed traps, watch your gas level, go easy on the clutch, and, above all, beat the clock.

Because when that clock stops, so do you.
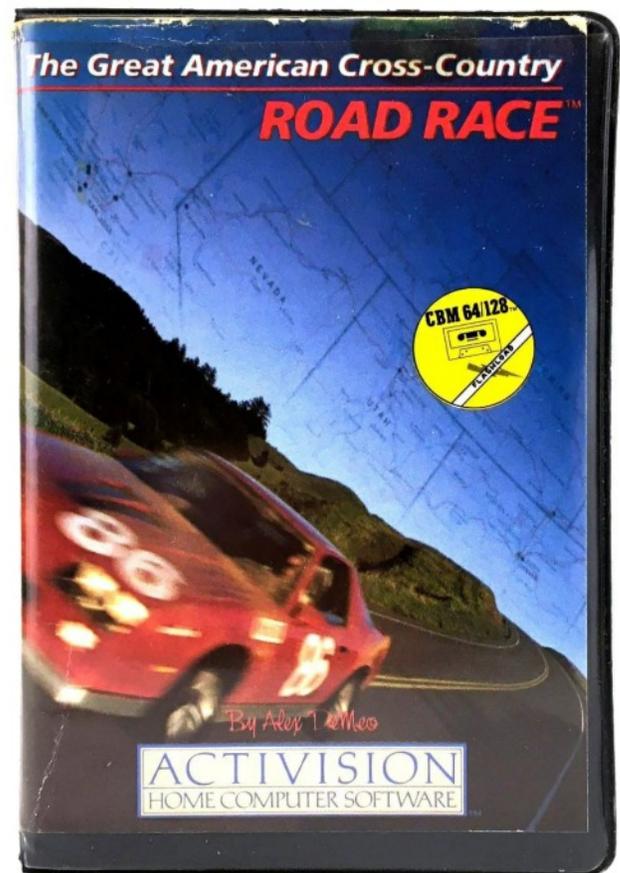
Basics

How to Start

Press **F1** to get to the map screen.
Press **F3** to select a race.
Press **F5** to adjust the time of day you want to begin the race.
Press **Y** or **N** to select a field to race against.
Note: The ability to load and save fields from disk has been disabled, therefore all fields are identical.
Press **Y** or **N** to select your route.
Press the **fire button** from the map screen to begin game.

The Task Before You

The first screen you'll work with is the "Field/Route Select Screen". You will be asked to select a field of racers to compete against. A "field" refers to a line-up of ten drivers whose already-established times you will attempt to beat. There are eight fields to choose from plus a field of computer scores marked "0" (zero) which appears when the game is first loaded.

You will then be asked to select one of four possible cross-country routes (races):
1. Los Angeles to New York
2. Seattle to Miami
3. San Francisco to Washington
4. U.S. Tour

Each race is from the West Coast to the East. The U.S. Tour also begins on the West Coast, but requires you to drive through every city on the map.

After selecting a race, the "Map Screen" appears. Here you will set your time of departure, select your next destination city and check road and weather conditions.

Once the race begins, watch out for police speed traps, poor road conditions, night driving, bad weather, collisions and gas levels. Also, don't forget to shift gears, or you'll blow your engine (See On the Road, below).

When you arrive at a destination, a "WELCOME" message is displayed, followed by the Map Screen. Then, it's time to select the next stop on your cross-country route. Previous stops will become red on the Map Screen. Continue in this manner until you reach your final destination, at which time you will receive your final results and field ranking.

Getting Underway

The Field/Route Select Screen

Selecting a Field: The first message you will see asks if you wish to "LOAD OPPOSING FIELD FROM DISK? Y OR N" If you wish to compete against a field other than the one displayed, press Y. Then press a numbered key from 1-8 to select desired field. If you wish to compete against the field already displayed, press N. Note: The ability to load and save fields from disk has been disabled, therefore all fields are identical.

Selecting a Route: The next note asks, "DO YOU WANT TO RACE THIS ROUTE? Y OR N" referring to the race displayed near the top of the screen. Remember, there are four routes to choose from. Press Y if you wish to choose the route displayed. If you wish to take another route, press N until the route you want is shown, then press Y. You will automatically move to the Map Screen after selecting a route.

The Map Screen

Time of Departure. You must set the clock in the lower corner of the screen for the time you wish the race to start. Plan carefully! Try to project your arrival times to avoid rush hours and night driving in hazardous areas. Press F5 to set the clock.

Destination. The flashing circle highlights your current location. The arrow points to a possible next stop along your route. Use the joystick to move the arrow to other destination cities. Check road conditions as you do so (See Road Conditions below). Only cities connected to your current location by a major highway are eligible choices.

Road Conditions. A bulletin moves across the top of the map describing the road conditions on the route you are considering. Poor conditions can slow you down.

Weather Conditions. Check the weather symbols on the map. Snowflakes indicate snow, rainclouds indicate rain.

Press the joystick button when the arrow is pointed at the destination of your choice, and you will see the view from your idling race car, ready to start the race.

The Race Is On!

Now that you've chosen the above settings, you may begin the race. The clock is ticking, but first-timers might want to check the instrument panel before taking off.

The fuel gauge shows your gas level. You begin with a full tank.

The timer at the center displays the amount of time you have to complete that leg of the race. If time runs out before you reach your destination, you'll be disqualified. Reach your destination with time to spare, and that spare time will automatically be added to the time allowed to complete the next leg of the race.

The mileage indicator below the timer displays the distance to your current destination. This counts down as you approach your destination.

The radar detector will flash when a police speed trap lies ahead.

The RPM gauge tells you how hard your engine is working. Watch this carefully or you may blow your engine.

The MPH 'clock' (speedometer) tells you how fast you're going.

You will see "ET" which shows your total elapsed race time so far.

To begin racing, press the joystick button.

On the Road

Controls: To accelerate, press the joystick button. Pull back on the joystick to brake. Move joystick left or right to steer.

Shifting gears: Your car has four gears; it always starts out in first gear. The faster you drive, the faster your engine turns - the speed of these turns is shown on the RPM (revolutions per minute) gauge. As the RPM rises, you'll hear the engine's whine get higher, and it will be necessary to shift gears. Be careful! When that whine gets really high-pitched and the tachometer tops 9500 RPMs, it is time to shift to a higher gear. Otherwise, you may blow the engine, and you'll have to push the car to the next gas station.

You can also shift too soon. If you are not driving fast enough to warrant being in a higher gear, acceleration will be sluggish and slow. Downshift to match gear to speed.

Push your car (when you've run out of gas or blown your engine) by pressing the joystick button repeatedly.

To shift gears:

Release the joystick button. This pushes in the clutch.

Tap the joystick forward to shift into a higher gear; tap it back to downshift to a lower gear.

Press the joystick button to accelerate again.

Gas is available every 100 miles. Upcoming pumps are announced onscreen. To refuel, pull up and stop next to the pump. You'll hear the gas pumping as your gauge moves to the right. Note: A gas pump will appear sooner than the 100 mile interval whenever a blown engine or empty gas tank forces you to push your car.

Radar: The radar detector flashes to warn of an approaching speed trap. You'll soon see a police car. Pass politely, unless you think you can leave him in the dust. Can you?

Collisions throw you into a skid and put you back into first gear. When the skid ends, accelerate, start shifting, and get back into the race!

Reaching a Destination

"WELCOME!" will flash over the skyline as you enter each city en route to your ultimate goal. Then, the Map Screen will appear.

It will display your current ET (elapsed time) and average miles per hour.

The flashing circle shows your current location. Your previous stops will show on the map as red dots. The flashing arrow points to a city suggested as your next destination. You can change this destination by moving the arrow with the joystick. Your current ranking among your chosen field of drivers will be shown above the map.

Resuming the Race: Once you've set your next destination on the map, press the joystick button to begin that leg of the race.

The End of the Race

The race can end in one of three ways:
1. Disqualification. This occurs as soon as you run out of time at any point in the race.
2. Finish, but not in top ten. You may finish the race but not rank high enough to be placed with the top ten contenders in your field. In that case, you will still be congratulated on screen, and your rank will be displayed above the top ten. You can

see how close (or far) you were from a place on the board.

3. Finish in the top ten. You've earned a place in the rankings determined by the computer. Look for the flashing square and type your name and the date in the space provided. To save your outstanding performance, select Save Game from the File menu.

Miscellaneous Control Keys

To begin a new race at any time, press **F3** for the Field/Route Select Screen or **F1** for the Map Screen.

When on the Map Screen, press **F5** to set your time of departure.

To freeze the action, simultaneously press the **joystick button and the Space Bar**.

When left unattended, the screen will eventually black out. To resume the action, press the **joystick button**.

Whenever you return to the Field/Route Select Screen during a race, that race will be discarded.

Keyboard

Function Key	Description
F1	Restart at Map Screen
F3	**Restart at Field/Route Select Screen.**
F5	Set Departure Time on Map Screen.
Joystick button & Space Bar	Pause. Press the joystick button to resume.

See the _Game Options_ section for information on configuring your keyboard for use as a joystick.

The following keys are used in this game, and should not be reassigned to the joystick functions:

–The alphanumeric keys are used to enter your name and the date when you finish in the top 10.

Joystick

Steer the car by moving left and right. Accelerate by holding down the joystick button. To shift gears, release button and push joystick forwards or backwards to shift up or down, respectively. To brake, pull back on the joystick.

Scoring

Scoring is based on how quickly you are able to complete the race. Compete with other players and see who can finish with the fastest time.

Hints

If you hit a patch of snow on the road, always steer towards the center of the road.

Alex DeMeo, Designer and Programmer:

"I remember this one great trick I used to do. I programmed the game so that if you ran out of gas, it would feed you gas stations about every ten miles. The trick is to get up to really high speed, run out of gas, and glide. If you were good at it, and didn't hit anything, you could glide all the way to the next gas station, so, effectively, you'd never have to stop to refuel! Of course, if you missed the gas station, there was no reverse, so you'd have to push the car a full ten miles to the next one!"

Game History

Alex DeMeo, Designer and Programmer

"I felt that in most of the driving games that were around back then, you were basically driving in circles. So I thought, 'What if we did a road race like the movie "Gumball Rally"?' In fact, if I remember correctly, the working title for the game was 'Gumball'. That was what we called it while it was in development. It was sort of a 'Cannonball Run' type thing."

Fans of the Atari 2600 will certainly notice a similarity between The Great American Cross-Country Road Race and a game called Enduro for the Atari. (Look for it on the Activision Atari 2600 Action Pack, Volume II.) Alex explains the similarity: "The Enduro game was a very popular 2600 game. Enduro was based on passing a certain number of cars in a certain time. The code and drivers [parts of the program for the game] from Enduro that displayed the road and fed cars to pass were used as the engine for Great American Road Race. But when you moved to more powerful systems like the Atari 400 or 800, or the Commodore 64, more was expected of the game, so the whole design, graphics, sound, and so on, were all redone for the new platforms. We added

elements too, like the dashboard and the police. The program itself was rewritten from Enduro, due to the extreme differences

between the platforms. The Atari was a very simple machine - you needed to do ALL the graphics yourself, 'by hand', almost, in the game. The Commodore was more powerful and had better graphics capabilities, like sprites." (A sprite is [from the Commodore User's Guide, p. 68] "a high-resolution programmable object that can be made into just about any shape". Sprites eased the programmer's job of redrawing the screen as the game proceeded.)

"The Great American Road Race was originally programmed and designed on an Atari 800. I did the sound, the music, the programming, the design, and some of the pixelated graphics work. The C64 graphics were done outside, though."

"For a while, Road Race had the distinguished honor of having the longest title of any game, up until 'The Complete Computer Fireworks Celebration Kit', another Activision title."

"When I was researching the distances between cities, to make sure I scaled it right, I just used a regular old road atlas, and tried to choose the cities so that no segments were too short or long. Of course, due to the geography, some things were unavoidable, like the drive from Boston to New York, which is really too short for this game." Obviously, one can't drive from Boston to New York inside four minutes, even at 100-200 mph (the game's speeds). "The measurements were all an even multiple of the real thing - I think it was 128 times faster than real time. So if you took 10 minutes to drive a segment, theoretically if you drove that same drive in real life at the same speed you did in the game, it would take exactly 1,280 minutes."

"It's really easy to miss a gas station, and I had this list of things I wanted to fix or improve in the game, but we just had to ship it. One of the things on that list was reverse gear, but the game had to go out.

"We wanted a really interesting title screen, where the car would speed by and blow up a lot of dust in its wake. At the time, Peter Kaminski and Russ Lieblich were working on a game for the C64 called 'Master of the Lamps'. There's this one scene in Master of the Lamps where the screen fills with smoke. I lifted the algorithm from Peter, and made minor modifications so it would look like dust. It's not smoke, though - if it was smoke, that would mean the car was a dog. So if you look

closely, there's actually a graphic under the back wheel where the rocks are flying up from the road."

Alex is currently working for a computer game company called Absolute Entertainment which he co-founded with other Activision alumni John H.E.R.O. VanRyzin, and brothers Dan and Garry Kitchen. Also working at Absolute is David Pitfall Crane.

Troubleshooting Great American Cross Country Road Race

Great American Cross Country Road Race Game Specific Notes

On 486 systems you may notice that gameplay will seem a little slow. If so, set your Animation slider under the **Game Options** section in the **Settings** menu toward fastest. (see Win95 Troubleshooting Pg 52+)

When you end a race, you are asked to enter your name in the field against which you were racing. This information will not be saved. If you would like to record your best times you should save them in the Hall of Fame section under the File menu.
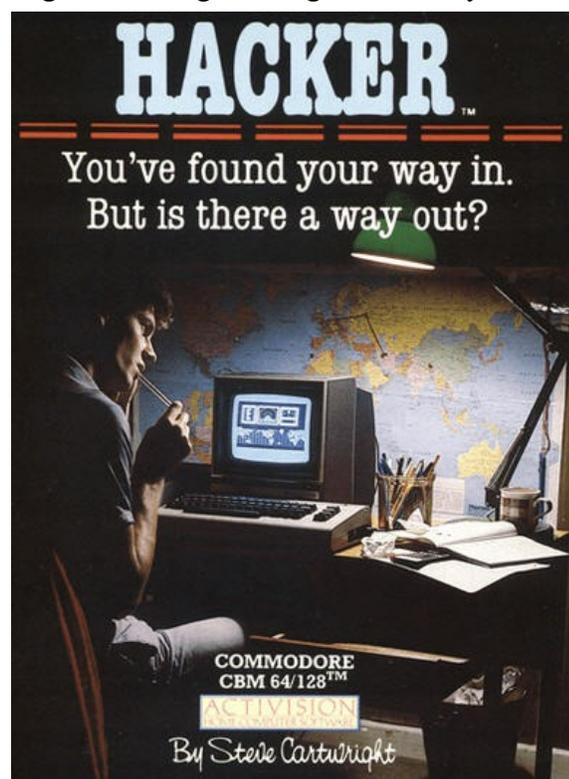
_____

Hacker

General Description

Temptation.

To stumble into someone else's computer system. To be someplace you're really not supposed to be. And to get the strange feeling that it really does matter.

"LOGON PLEASE:" is all you get to start with. That's it. From there, it's up to you. If you're clever enough and smart enough, you could discover a world you've never before experienced on your computer.

Very tempting...

Basics

LOGON PLEASE:

What's going on here? Who are these guys? What are they doing? What am I doing?

In Hacker, it's up to you to figure it out. We can't tell you. We won't tell you.

For as every hacker knows, there just aren't any instructions for this kind of thing...

Keyboard

We told you, there are NO instructions...

We do, however, recommend that you read the Game Options section for help on configuring your keyboard for use as a joystick, as the alphanumeric keys are needed to finish the game.

Joystick

We said no instructions...and we weren't kidding!

Scoring

Nope. No instructions here, either. Nice try, though...

Hints

If we WERE going to give instructions, do you REALLY think we'd put them here?

Game History

Brad Fregger, Producer

"The original inspiration for Hacker was this:

one day there were a bunch of us sitting around talking about how hackers work. The people who worked with computers knew that hacking was just boring number-crunching and very tedious work. Of course, this was at the time when hackers were just starting to appear in the media, if not before, and the people who were not into computers had this really romantic idea of what a hacker does – cracking codes, getting all these nifty passwords, and so on. So Steve [Cartwright] said 'Hey, that's a great idea - let's base a game on that romantic idea'. He started plugging away, and before we knew it, we had Hacker."

Management was very different in those days. The relationship between a programmer and a producer was more like that between an athlete and his or her trainer than one of employee to boss. "I was a producer, a manager, but not a programmer. I was sort of a 'Creative Manager', who helped things happen, who would keep management off the 'creative element's back, but each programmer was responsible for their own project."

Steve Cartwright, Designer

"Most games designed back then evolved out of little more than an excuse to move objects on the screen. Hacker, for example, started out as a robot delivering mail through underground tunnels. That, of course, was not very exciting. What it really needed was a more interesting story."

"At the time, David Crane was working on Ghostbusters. Part of the gameplay of Ghostbusters involved 'creating a user account'. Knowing virtually nothing about computer networks at the time, I was really intrigued by people who could 'Log on' to computers remotely. So I took that element of Ghostbusters and made it the front end of Hacker. Next, we needed a story to explain why this robot was going around the world. We hired a writer to come up with the plot. The title itself was the last thing put on the game. At the end of its development, Brad [Fregger], the game's producer, said 'Let's call the game Hacker'. I was against it, because that word itself meant nothing to me at that time. Brad, of course, prevailed, and by sheer luck, the release of Hacker coincided with the news of hackers breaking into Universities and secret government computer systems. The whole thing was very lucky."

To promote it, Steve went on a very interesting press tour. The idea was to promote the dark and

mysterious aspect of the game. "We called in computer experts to tour with us to verify that the game was safe to play and was indeed just good clean fun."

"The first time the game was shown to the press, though, I pulled a fast one that even fooled the people on the press tour with me. In the middle of a room full of reporters, I announced that I was going to log on to Activision's computer to download the latest copy of the game. Of course, I DID have the latest version. So when I pretended to dial up Activision and was presented with the now-famous 'Logon please:', nobody suspected that what seemed to be a hacker at work was really just a game."

Disclaimer: This program simulates the experience of being a computer hacker and is intended solely for entertainment purposes. Activision in no way endorses or condones any activities associated with gaining illegal entry to computer networks or files.

Troubleshooting Hacker

How to Start

Sorry.

Hacker Game Specific Notes

Near the end of the game, you will need to use sound to help you through, so make sure your sound card is working and turned up. In addition, to hear all of the sounds, keep the setting of the **Animation** slider one setting above **Smoothest**. If you are having problems with sound, check No Sound below for advice on getting it working.

Also, if you have trouble printing at the end of the game, press the **Print Screen** button on your keyboard to take a snapshot of the screen, then open Microsoft Paint or other bitmap editor, and select **Edit** - **Paste**. Then, use Paint to print a copy of the picture.

Little Computer People

General Description

This deed gives you official permanent title to the research software "house-on-a-disk" accompanying this software. You, the undersigned, agree to maintain said house and its occupant according to the instructions put forth below. Congratulations on your new house!

There really are little people living inside your computer. And one of them is waiting for you to give him a home...and be his friend.

He will talk to you and play with you and live a very happy life, as long as you take care of him.

This Discovery Kit contains a house for one Little Computer People. Try it. See who moves in. You will discover a whole new world of computer fun and friendship.
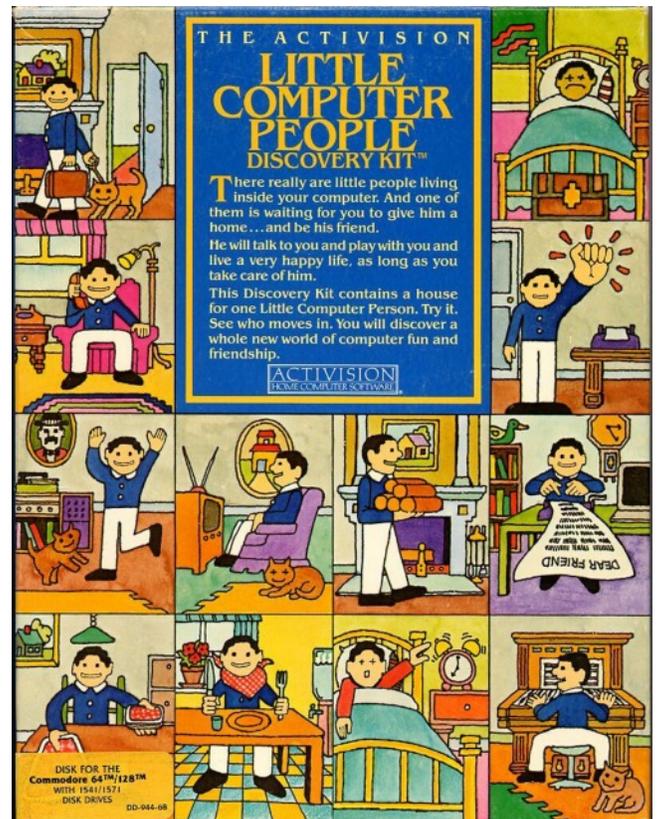
Bonus Feature for 15 Pack users!

Selecting <u>R</u>estart Game from the <u>F</u>ile menu will allow you to generate a new Little Computer Person to live in your House-on-a-Disk! Note that you can only have one person inhabit your computer at a time, so if you do choose to generate a new Little Computer Person, you WILL evict the one currently living with you.

Basics

How to Start

Follow the on-screen directions to begin the game.

Letter of Introduction

Dear Fellow Researcher,

We're happy to welcome you to the Activision Little Computer People Research Group.

As you may have read, we suspected for quite some time that there was something living inside most computers. But we didn't know who, what, or how many there were.

After years of research, hard work, and creative speculation, we invented what finally became the turning point in this arduous investigation: the "House-On-A-Disk".

When our first Little Computer Person so tentatively entered his new "home", it was an experience beyond explanation. You'll soon see what we mean.

From that moment on, we have been collecting volumes of information on the Little Computer People: what their personal habits are, what they like, what they don't like.

We now believe that every single computer has its own Little Computer Person. And that every Little Computer Person is unique in appearance and personality. This is why we have opened this research project up to all interested computer owners.

We also have strong evidence indicating that there are actually several Little Computer People in every computer. But it seems that only one will reside in any given home. So, if you find you enjoy caring for and observing your first Little Computer Person, you may want to sign up to study others your computer may hold.

The preceding guide is a compilation of what's currently known about providing for the little person inside your computer. Use this guide as an outline.

But remember, please, to experiment on your own.

There are many questions that are still unanswered. And only through the support and cooperation of people like yourself will we ever be able to fully understand our newfound friends.

Sincerely,
David Crane and Sam Nelson

For the Activision Little Computer Person Research Group

Making Contact

Every time you follow the procedure outlined in this section of the guide, you will begin a new research session with your Little Computer Person.

In your first session, you will be required to enter your name, the date and time for your research files.

In all subsequent sessions, you will only be asked to enter the date and time.

Entering Your Name

The first thing to appear on the screen is your research notebook. You will be asked (in your first session only) to log your name into the project files. (To later change the name, see Changing the Researcher's Name below.)

Using the keyboard, type your name (first name first) in the spaces provided on the screen

Entering the Date

The format for entering the date is **MM/DD/YY**, where **MM** stands for the month, **DD** stands for the day, and **YY** stands for the year. Be sure to enter the numeric digit for each space. Use zeros in front of numbers less than ten.

For example, if you start a session on January 1st, 1986, type: **01 01 86**, then press **RETURN**.

Entering Time

The format for entering time is **HH/MM**, where **HH** stands for the hour and **MM** stands for the minute. As in **Entering the Date**, above, use zeros in front of numbers less than 10. Type **A** for **AM**, **P** for **PM**.

Twelve o'clock midnight should be entered: **12 00 A**, noon should be entered as: **12 00 P**.

Moving In

If this is your first research session, your house will be empty when it appears on the screen. Based on our findings to date, most Little Computer People are quite shy and will not readily rush into a new situation. In fact, it may take several minutes before they actually muster the courage to step inside the new home you're providing for them.

On the other hand, Little Computer People have also been found to be quite loyal. Once they have moved in, you can expect them to be in their new home on subsequent sessions. In fact, we've never seen one move out yet.

When a Little Computer Person enters a house for the first time, we've found that he will usually inspect the new home for anywhere from 5 to 10 minutes. Then he usually leaves to retrieve his belongings. Yours will probably return shortly with his suitcase. Most Little Computer People also bring their dog. If yours doesn't, contact us. **NOTE:** KEYBOARD COMMANDS ARE NON-FUNCTIONING DURING THE MOVE-IN SEQUENCE.

Care and Feeding of Your Little Computer Person
- or -
How to Make Sure the Person Inside Your Computer is Healthy, Happy, and Totally at Home.

Although Little Computer People are basically quite independent, once they move into their new home they are, in a sense, living in your world. So they will need your help in certain areas.

To ensure that your Little Computer Person is healthy, see that he always has food and water. (The dog also needs food.) Both hunger and dehydration can make Little Computer People sick. They generally turn green and just lie in bed when they are sick.

Also, because they tend to be quite active, they should not be allowed to sleep too much. They would much rather have your attention.

Caring for Physical Needs

Hold the **CONTROL** key down and press the designated letter to care for your Little Computer Person's physical needs.

[CTRL] F - Food is delivered to his front door.
[CTRL] W - Fills the water tank. Each time you press **[CTRL] W**, approximately one glass of water is added to the water tank.

[CTRL] A - Rings the alarm clock.
[CTRL] D - Leaves dog food at the front door. Your Little Computer Person will do the rest.

Caring for Emotional Needs

Addressing the physical needs of your Little Computer Person is relatively easy. To know if he needs food or water, you simply look to see if his supply is running low.

Addressing emotional needs, however, takes much more sensitivity and careful study. First of all, you must be aware of his different moods. So far, we've discovered four distinct moods in the Little Computer People:

Happy
He's probably getting plenty of attention.

Content
He's fine but could be better. Try a **Mood Booster**.

Sad
Needs **Mood Boosting** immediately

Sick
This happens when he has gone without food and water for a long time.

Mood Boosters

There are several ways to elevate the mood of your Little Computer Person. Studies indicate that some ways are more effective than others, and new techniques are constantly being reviewed and discovered. Please record your own discoveries.
[CTRL] C - A phone call. Many Little Computer People enjoy receiving phone calls - unless they are constantly interrupted to the point of irritation. We have not yet deciphered their spoken language, nor discovered with whom they chat.
[CTRL] P - Physical contact (or "Petting").
We haven't found one yet who doesn't respond to this instantly. **Note:** in order to pet your Little Computer Person, he must be sitting in his easy chair in the living room. To call him to the chair, press **[CTRL] P** and he will know you want to pet him.

[CTRL] R - Leaves a record for his stereo at the front door.

[CTRL] B - Leaves a book at the front door for him.
Note: Records and books elevate your Little Computer Persons spirits only for mild cases of the blues.

Playing Games - this is one of their favorite pastimes, so it naturally makes them feel great. See *Playing Games below f*or details.

Recreation and Relaxation

Most Little Computer People are very good at entertaining themselves. They're good pianists and can play compositions from Bach to Boogie Woogie. They also like their record collections. In fact, albums make great gifts for them.

We've noticed that some Little Computer People exercise frequently. Many seem to enjoy playing with their computers or sitting down in their easy chairs with the newspaper we've provided. You may even be able to talk them into building a fire in the fireplace. (See *Keyboard Communication*, below.)

Keyboard Communication

We recently found that we can communicate quite extensively with Little Computer People by typing sentences using the computer keyboard. These sentences can be in the form of questions, suggestions, or requests. We use them to evoke a wide range of responses and reactions from Little Computer People. You can do the same.

Though we are just beginning to scratch the surface, here are a couple of requests we have tried.

> Please type a letter to me.
> Please build a fire.

Little Computer People are especially responsive to good manners. So remember to incorporate words like "Please" and "Thank you" into your requests.

Changing Researcher's Name

To change the name of the researcher, type "logon please", and then press **RETURN**. Select the program called "**Name Changer**" by pressing "**1**" (one) on the keyboard. Then follow the instructions at the top of the screen.

Starting Over with a New Little Computer Person

If you select **Restart Game** from the **File** menu while playing Little Computer People, you will be asked "Would you like a different Little Computer Person?" If you would like to generate a new person to inhabit your House-on-a-Disk, press Yes, and a new Computer Friend will move in. To keep the same Little Computer Person that is currently living in the house, press **No**. Pressing **Cancel** will return you to the game.

Note that you can only have one person inhabit your computer at a time, so if you do choose to generate a new Little Computer Person, you WILL evict the one currently living with you.

Playing Games

As far as we know, almost all Little Computer People like to play games. Each Little Computer Person has his own individual favorites, so we've listed a few of the games we've noticed occurring most frequently, along with simple instructions for playing them.

A Little Computer Person will usually allow you to make the game selection. He will knock on the glass of your TV or monitor to get your attention and ask you to select a game from the list at the top of the screen. Type in the number of the game you want to play.

1. Card War

This is a simple game in which you are each dealt 26 cards from a 52 card deck. (Little Computer People always prefer to deal.)

You both draw the top card from your pile. Your Little Computer Person will show you his card first. To show your card, press **F1** as indicated by the command menu in the upper right corner of the screen. Whoever has the higher card wins the hand, and both cards are added to the winner's stack.

When both cards shown are of equal value, this is called **WAR!!** At this point, your Little Computer Person deals out 4 more cards to himself and 4 more cards to you, face down. He will then turn over his last card; press **F1** to show your last card. Whoever has the higher card wins the hand, and all of the cards on the table are added to his stack.

If the last cards shown during a **WAR!!** are of equal value, then your Little Computer Person continues to deal 4 more cards each until someone wins the hand using the same rules.

The game is over when one of you has all 52 cards. You can press **F7** at any time if you decide that you want to quit.

2. Anagrams

When you play anagrams with your Little Computer Person, he'll insist on being the one to think of the word. You'll be the one who unscrambles it.

A scrambled version of the word he's thinking of appears in big type on the screen.

You type in what you think is the correct word, and he will tell you whether your guess is right or wrong. He'll let you guess 8 or 9 times before he tells you the word.

If you need a hint, press **F3**, and one letter will assume its correct place in the scrambled word.

Note: A Little Computer Person will not give you two hints in a row. You must guess at least once between hints.

Press **F1** to quit this game. We have never had a Little Computer Person quit playing on his own.

3. 5-Card Draw Poker

Standard poker rules apply. As usual, your Little Computer Person will probably insist on being the dealer. You're just going to have to go along with it.

You both start out with 200 poker chips, as displayed at the top left of the screen.

Your number of chips is below his. Bets and raises are limited to 20 chips each.

Press **F1** to **ANTE UP** one poker chip and begin the game.

The Little Computer Person will deal each of you 5 cards (yours are face up) and ask if you feel lucky. (He is really asking if you want to bet any chips).

The menu in the upper right corner gives you three choices.

Bet (F1) - Bets one poker chip every tim you press **F1**.
Enter (F3) - Enters your bet.
Pass/Clear (F5) - Lets you pass when you feel you have a weak hand and do not want to bet, or clears your bet if you decide to bet a different amount.

After you make a bet or pass, the Little Computer Person will either match your bet or pass.

When the Little Computer Person asks if you want cards, press any combination of numbers from **1** to **5** on the keyboard to discard the cards that you don't want. (As examples, to discard the card on the far left, press **1**. To discard the card second from the right, press **4**.) Press the number again to make your

original card reappear. You can discard all five cards if you like.

Once you've discarded the cards you don't want, press **F1** to draw replacement cards. Your Little Computer Person deals them to you.

If you want to keep all five of your original cards, press **F3** to stay. You will not be dealt any replacement cards.

Your Little Computer Person then tells you on the screen how many cards he discards.

You now have the option to make another bet.

At this point, your Little Computer Person may raise his bet and give you two choices:

See (F1) - Lets you match his bet.
Fold (F3) - Lets you abandon the hand, losing whatever you've bet so far.

If you opt to See, you'll be given three more choices:

Raise (F1) - Lets you raise the bet even higher.
Enter (F3) - Enters your raise.
Call (F5) - Stops betting for that hand and lays the cards on the table.

After each hand, you have the option to quit the game (**F7**).

Observations

It would be beneficial for you to create a log book in which to record your observations. You will quickly start to notice distinct character traits in your particular Little Computer Person. A detailed record of these traits is very important to the research project as a whole.

Please keep in mind that your discoveries and insights, like everyone else's, are critical to an accurate analysis of this important investigation.

Researcher's name:
Moving in:
Date:
Time:
Unusual Activities:
Appearance:
Hair:
Clothing:
Name of Little Computer Person:
Appetite:

Sleeping Habits:
Overall Health:
Predominant Moods:
Housekeeping Hints:
Hygiene:
Moods:
Musical Ability:
Game Playing Aptitude:
Letter Writing Ability:
Forms of Relaxation:

Keyboard

Key	Description
[CTRL] F	Food is delivered to the front door.
[CTRL] W	Fills the water tank. Each time you press **[CTRL] W**, approximately one glass of water is added to the water tank.
[CTRL] A	Rings the alarm clock.
[CTRL] D	Leaves dog food at the front door.

Your Little Computer Person will do the rest.

[CTRL] C   A phone call. Many Little Computer People enjoy receiving phone calls - unless they are constantly interrupted to the point of irritation. We have not yet deciphered their spoken language, nor discovered with whom they chat.

[CTRL] P   Physical contact (or "Petting"). We haven't found one yet who doesn't respond to this instantly.

Note: in order to pet your Little Computer Person, he must be sitting in his easy   chair in the living room. To call him to the chair, press **[CTRL] P** and he will know you want to pet him.

[CTRL] R Leaves a record for his stereo at the front door.

[CTRL] B   Leaves a book at the front door for him.

You can also use the keyboard to interact directly with your Little Computer Person. Try commands such as "Please play the piano" or "Please build a fire." Remember your manners!

Joystick

The joystick is not used in Little Computer People.

Scoring

There is no scoring in Little Computer People.

Hints

Be sure to pay attention to your Little Computer Person's emotional needs as well as his physical needs.

If you select <u>R</u>estart Game from the <u>F</u>ile menu while playing Little Computer People, you will be asked "Would you like a different Little Computer Person?" If you would like to generate a new person to inhabit your House-on-a-Disk, press Yes, and a new Computer Friend will move in. To keep the same Little Computer Person that is currently living in the house, press No. Pressing Cancel will return you to the game. Note that you can only have one person inhabit your computer at a time, so if you do choose to generate a new Little Computer Person, you WILL evict the one currently living with you.

Game History

David Crane, Programmer

"The idea for Little Computer People was actually brought to us by an outside developer. I was interested in the potential of the product and recommended that we buy it. The original name of the project was 'Pet Person', based on the 'Pet Rock' craze of the 60's."

"When it was brought in-house, the original plan was for it to be more like a fish-bowl, with no input from the user. I took it in and rewrote about half of the original program to include the interactivity that ended up in the final product."

"One interesting facet of the program that most consumers don't get to appreciate is that it was duplicated in-house. Since we had control over every disk that went out the door, we gave each copy of the game its own, unique serial number as it was copied. This serial number was then used to generate the personality, appearance, and behavior of the 'Little Computer Person' on the disk. Certain factors of the computer person were determined by this serial number - name, shirt color, personality traits, and so on. These factors were determined independently, so although there were probably many serial numbers that would generate a computer person named 'Tom', the chances that any two of them wore the same color shirt and liked the same game is almost nil. Each disk was effectively unique."

Sam Nelson, Producer

"The idea for the sequel to Little Computer People was to have a Little Computer People apartment complex. In that kind of a scenario, it would be more interesting to watch the interaction between the people, study the relationships that form, and so on. And you would be able to do things in several houses at once, so it would be more challenging." The reason no such game was ever released was that "Activision wasn't in the practice of sequelling what we had done already. So we just played around with it in the office for a little while and then dropped it on the floor."

On early Activision culture: "At the time, Producers were called 'Creative Development Managers'. They would manage the projects much as Producers do today. At one point, there was one big room where all the internal development was done. Steve Cartwright sat in one chair, David Crane sat in another, Bob Whitehead sat in another, and so on. So we were on one side of this wall, and on the other side was marketing, sales, finance, operations, and all the other departments not directly associated with product development. Only the design teams and the producers knew what products were being made at any one time. Once a game was finished, we would give them the final copy and just say 'OK, here it is'. These other departments would then produce, market, and sell the game."

Troubleshooting Little Computer People

How to Start

Follow the on-screen directions to begin the game.

Master of the Lamps

General Description

It tolls for thee.

Indeed, it summons you to the far reaches of fantasy. To ride a magical roller coaster and solve mystical riddles. To banish devious genies and rightfully claim a shimmering palace and its powerful throne.

It was once a land of peace. But now, the King is gone, and a mischievous band of genies has escaped and ransacked the palace.

As the sands of his life drew their final measure, a brave king bequeathed to his son an incredible throne - and a terrible trial.

Now, you can help the young prince return three genies back into their lamps and regain his rightful place on the throne.

Little Computer People Game Specific Notes

If nothing seems to be happening, be patient. Your Little Computer Person (LCP) is still moving in. You won't be able to interact with your LCP until he decides to move in (this may take as long as twenty minutes). After that, you are free to talk to him and take care of him. Also, Little Computer People has a built in "screen saver." If there is no keyboard input for a period of time, the entire window in which Little Computer People is playing will go black. Your LCP is still going about his business, the computer is just not displaying it. Just press any key and you will see your LCP.

When interacting with your LCP, remember, he is like any other human being. He doesn't respond to every command and will not do everything you ask. Also, try different ways of phrasing questions and commands. Remember to always say "Please" and "Thank You."

You don't need to save your LCP; the emulator saves his progress every few minutes to the hard drive.

When you start the game again, you will be asked to enter the date and time and your LCP will continue from this default area. If you open a Saved Game, you will not be prompted for the date and time – the game information in this Saved Game will be used. If you want a different LCP to move in, you can do so by selecting Restart Game from the File menu, but remember, your current LCP will move out and be replaced by the new one.

It tolls for thee.

Master of the Lamps

Indeed, it summons you to the far reaches of fantasy. To ride a magical roller coaster and solve mystical riddles. To banish devious genies and rightfully claim a shimmering palace—and its powerful throne.

ACTIVISION
HOME COMPUTER SOFTWARE
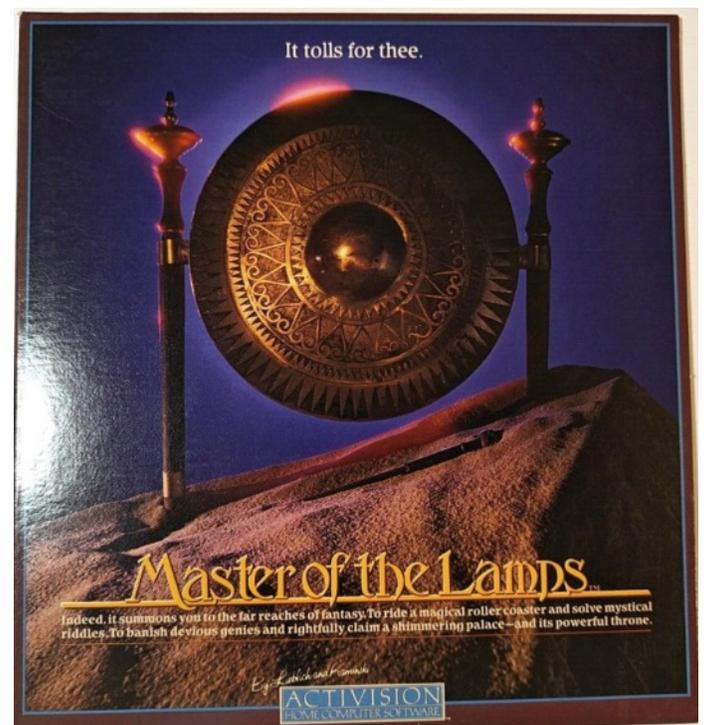
An Evil Upon the Land

``*It has been our sad fate for centuries, my son. Upon a king's death and the interruption of power, three evil genies escape from their prison-like lamps and threaten our land.*

``*Only you, my young prince, can reconstruct the lamps and recapture the genies. By surviving incredibly dangerous journeys. By entering the genies' dens and solving their mystical riddles of sight and sound, you will be rewarded pieces of the lamps.*

``*Three genies. Three lamps. Seven pieces each. If you, my eldest son, can prove your mental and physical worth - prove the power of good over evil - the genies will be banished once again. And the kingdom will be saved.*

``*May the flame of strength and wisdom burn brightly in your young heart!"*

Even as the dying king's warning fell from his quavering lips, three evil genies swarmed over his beloved land. And only a young, untested prince could stand in their way.

Embark on a spectacular journey through time and space.

Take an unbelievable, three dimensional magic carpet ride into the very dens of danger.

Solve unique, mystical riddles of music, memory, and color as you help a young prince reconstruct magic lamps and recapture mischievous genies.

Two years in the making. A masterpiece of computer design!

Basics

How to Start

Press **F1** to start.

Use the up and down controls to select your game. If you have problems try holding down the control instead of tapping them.

Press **fire** to start the game.

The Task Before You

Luring those three genies back into their lamps is a two-part challenge:

1. Fly the magic carpet through twisting tunnels of diamond-shaped gates that lead to the genies' dens.

2. Once there, match the tones and/or the colors sent forth by the genies.

Succeed at each level, and one piece of the genie's lamp will appear on the screen. There are seven pieces to each lamp. Each completed lamp will pull a genie back into its chamber.

Complete all three lamps to regain the throne and win the game.

Controller Selection

Controller one is a flight simulator. Push forward to fly down, pull backward to fly up.

Controller two is an arcade simulator. Push forward to fly up, pull backward to fly down.

Game Selection

At the game selection screen, you can choose Seven Trials (Beginner's Game), Throne Quest (Standard Game) or Magic Carpet (Flying Practice) by moving the joystick up or down. We recommend that new players start with the Seven Trials. Once you have made your choice, press the joystick button to begin that game.

Seven Trials - The tunnels are easier to navigate, and you are aided by both colors and tones in the genies' dens. Mastery is achieved upon completion of one seven-piece lamp.

Throne-Quest - Mastery is achieved upon completion of three seven-piece lamps. Color and tones are given alternately:

In the Seven Dens of the First Genie - Color and tone are given, but colors disappear quickly.

In the Seven Dens of the Second Genie - No tones are given, and the colors disappear as quickly as above.

In the Seven Dens of the Third Genie - No colors are given, just tones. Play it by ear.

When, at last, the three lamps are completed, fly a final tunnel back to the palace. You will see the palace in ruins, ransacked by the mischievous genies. But, since you have now proven your abilities so well, striking the gong three times will bring pleasing results.

Magic Carpet - For flying practice only. Select any of the 21 tunnels used in Throne Quest (numbered 1 through 41, using odd numbers only). When you move the dot down to this selection, keep pulling back on the joystick until the desired tunnel number appears. Once flown, the same

tunnel will be repeated. (Note: The joystick button may be used during this level to restart or select a new tunnel.)

Getting Underway

To begin, walk to your Magic Carpet by moving the joystick in that direction, then watch the carpet rise.

Fly through the tunnel to the genie's den by maneuvering the Magic Carpet with your joystick. If you miss a gate and fall off the carpet, you'll begin that tunnel again.

Once in the genie's den, you must match the tones and/or colors the genie sends forth. But first, practice moving and hitting gongs. You can hop quickly from gong to gong by pressing the joystick button and moving the joystick in the desired direction. To walk from gong to gong, move the joystick left or right. To hit a gong, push forward on the joystick.

When you're ready to summon a genie, hit any gong three times. He'll materialize and blow colored tones into the air. When he is finished, the first note will move to the top of the screen and begin to drop. At this time, hit the gong which corresponds to the note which has risen. Match each successive note in the correct sequence. **Do not hit the gong before the note reaches the top of the screen**. But when it does, move quickly! If you don't match the tones in time, you'll be transported out of the den, back to the beginning of the tunnel. Then, you must begin the same journey again.

If you match all the tones in one den, you'll go on to the next tunnel and the next den, until all of the Lamps are assembled.

Keyboard

The keyboard can be made to act as a joystick. See the *Game Options* section on how to configure the keyboard for use as a joystick.

Joystick

Joystick one is a flight simulator. Push forward to fly down, pull backward to fly up.

Joystick two is an arcade simulator. Push forward to fly up, pull backward to fly down.

You can hop quickly from gong to gong by pressing the joystick button and moving the joystick in the desired direction. To walk from gong to gong, move the joystick left or right. To hit a gong, push forward on the joystick.

Scoring

There are no points awarded in Master of the Lamps. There is only success or failure.

Hints

Special Tips From a Master's Notebook

The most important tip is to get to know the tunnels. There are 21 in the Standard Game, and they always move in the same manner. Some move up and down, some move left and right. So, if you always crash in tunnel 29, select "Magic Carpet 29" on the menu screen and practice.

Hot Tip #2: A good navigator will keep his/her eye on the farthest diamond and try to keep it in the center of the screen. You really don't need to move around too much. Don't overcompensate when you're trying to get back on track.

You can also play Master of the Lamps with a friend, since both joysticks will work at the same time. For instance, while flying through the tunnels, one of you can steer left and right while the other steers up and down. Or, you can match half the notes the genie sends forth and your friend can match the other half. Be careful, though -- since both joysticks work simultaneously, you can cancel each others' movements if you try to move in opposite directions!

Game History

Russell Lieblich – Designer

"I worked on Master of the Lamps with Peter Kaminski. He was the programmer, and I did the music and the design of the game. Part of the goal of Master of the Lamps was to create a digital sound-light landscape to experiment with color-sound relationships, even with full knowledge that the system had very finite limits."

"Master of the Lamps was originally scheduled to be released on the Intellivision. But by the time it was finished, it was too late to release on that system."

Before joining forces with Activision, Russ spent most of his time studying music. He currently owns a recording studio in the San Francisco area, and occasionally works on computer game projects. He plays the keyboard primarily, but is also a professional saxophone player. He also did the music for a CD game called "The Manhole".

Park Patrol

General Description

Trouble in Timberland!

Let us remind you. As Ranger of Poconose Park, you have a tremendous responsibility. Clean up the litter. Keep your eye on the swimmers. And, whip those wild forest creatures in line. Go to it!

Basics

How to Start

Press **F1** to start a 1 Player game.
Press **F3** to start a 2 Player game.
Press **F5** to change the game options.

Customizer Option

Press **F5** to display the menu screen. You can use this screen to customize the difficulty of each level. Use the joystick to move the flashing cursor next to the attribute you wish to change. Then, press the joystick button to cycle through the options available for that attribute.

To save the current setup, **DO NOT** use the **Save Menu** option on the screen, as it is disabled. Instead, select **Save Game** from the **File** menu.

Similarly, to load a setup, select **Open Game** from the **File** menu.

Patrolling the Park

Move your on-screen ranger around by pushing the joystick left, right, forwards or backwards. Press the joystick button to:
1) Enter or exit your raft,
2) Release snake repellent in the water, or
3) Hop over objects on land.

To pick up trash, move over it. To rescue drowning swimmers, sail into them.

Performance Chart

Use the chart at the bottom of the screen to monitor your work. It shows how many pieces of litter remain, and tracks your energy level. When you fall below 1000 CALS (calories), re-energize by walking into the supply hut, or reclaiming stolen supplies from giant ants (see Dangers). Also, a flashing "HELP!" means that a swimmer is in trouble. Swimmers always swim near the supply hut.

Dangers in the Park

Beware of swamps! They'll swallow you up. If the terrain looks funny, walk around that spot!

Sneaky snakes can deflate your boat. Force them to dive with your snake repellent. But remember, each blast costs 200 energy cals.

Turtles are harmful on land, but once lured into the water, they can be sailed over for points. Blue turtles cannot be lured into the water.

Giant ants will steal your food. Walk into them from the side or kick them from behind to retrieve stolen supplies.

Logs should be steered around. But, if you're really adventurous, try dancing on one for big points. Just hit the log head-on at top speed, and stay on the moving log until the bar at the lower right of the screen turns blue.

Swimmers can deflate your raft if touched when they're not in trouble.

If a swimmer drowns, you lose your current ranger.

Power Plant

Strange things live in the forest. Like the mysterious plant that grows just to the left of the supply hut. Touch it and you'll hear a ringing sound as it grows. When the plant is fully grown, eat from its power fruit by pressing the joystick button and watch yourself take off! You must pick up a drowning swimmer or a turtle in the water to be able to make it grow again.

The game is over when you run out of lives or when the Ranger needs energy and your supply hut is empty.

Keyboard

Function Key	Description
F1	One player
F3	Two player
F5	Display the menu screen.

The keyboard can also be used instead of a joystick. For information on configuring your keyboard for use as a joystick, see the Game Options section of this help file.
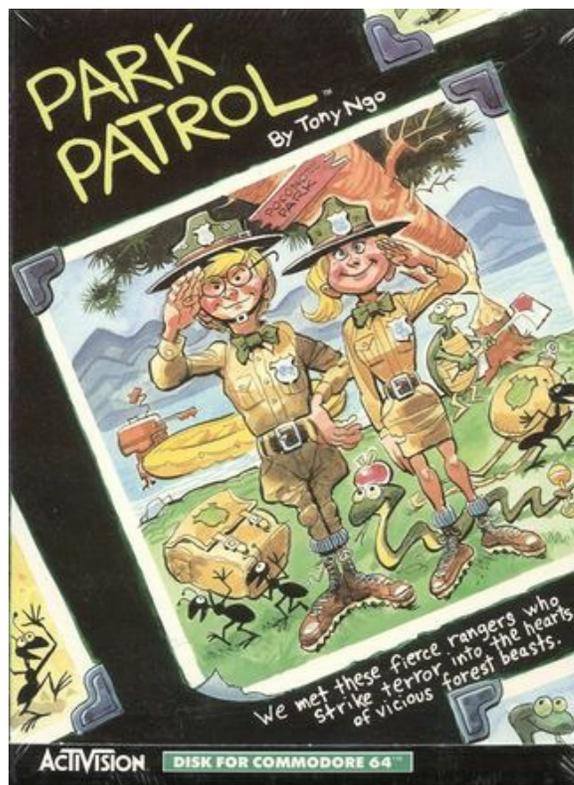
Joystick

Move your on-screen ranger around by pushing the joystick left, right, forwards or backwards. Press the joystick button to:
1) Enter or exit your raft,
2) Release snake repellent in the water, or
3) Hop over objects on land.

Scoring

100 points for each piece of trash collected.
Bonus points for remaining energy and supply cals at the end of each level.
A bonus Ranger is awarded every 20,000 points.
5000 points and 1000 supply cals are awarded for each rescued swimmer.
5000 points for successfully dancing on a log.
200 points for sailing over a turtle.

Hints

Try not to get ahead of yourself once there are snakes in the water. If you are traveling at full speed, you will not have enough time to drop repellent before a snake punctures your raft if one should appear.

Portal

Game History

Tony Ngo also worked for a company called Sirius Software, and wrote, among others, a game called "Bandits" for the C64.

Troubleshooting Park Patrol

How to Start

Press **F1** to start a 1 Player game.
Press **F3** to start a 2 Player game.
Press **F5** to change the game options.

Park Patrol Game Specific Notes

On 486 systems, gameplay may seem slow. If so, set your Animation slider in the Game Options section under the Settings menu toward Fastest. See Game Too Slow for advice on speeding up gameplay. (see Win95 Troubleshooting Pg 52+)

We also recommend using a joystick for this game. If you need help setting up your joystick, see Joystick Does Not Work below.

Portal

General Description

Homer, a biological computer. The final link to the past and the only conduit to the future. But Homer is dying and access grows weaker moment by moment. Will you discover where everyone has gone or will the doorway to humanity close forever, leaving you totally alone?
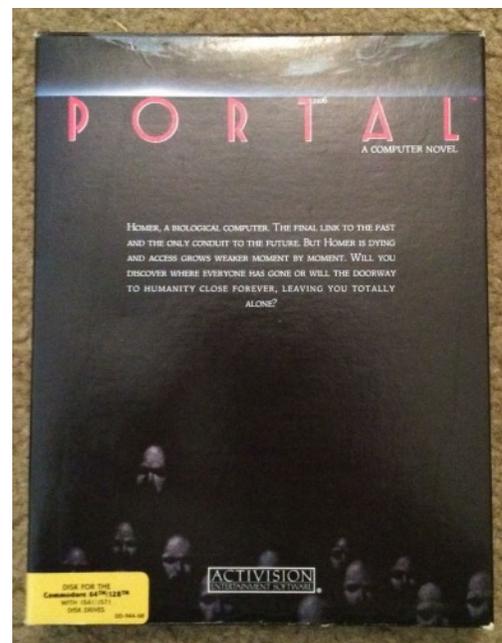
It is the distant future. The 21st Century has long since come and gone. Returning from a failed 100-year voyage to 61 Cygni, you reenter the earth's atmosphere to find that the world is not as you once knew it.

Where once there was teeming humanity, now there is quiet. The empty shells of mile-high skyscrapers stand at rest in the awesome silence. The vista, nothing but forests and meadows, rivers and lakes, is beautiful but eerie, for there are no people...

Finally, you discover an on-line computer terminal that you can operate. Through it you contact Homer, the ultimate achievement of man's technology - A living computer. Together you and Homer must unravel the mystery of the vanished civilization before it's too late. If not, you face an eternity of total solitude.

Basics

How to Start

Enter your name and the game begins.

Objective

The goal of Portal is to discover the fate of humanity by working your way through computer files.

In the upper left section of the screen is a scrolling window which allows you to see several icons for the 12 dataspaces. To begin the game, use the joystick to center this window on the icon representing Central Processing, which has a "CP" label on it. Press the joystick button to enter the dataspace.

Once inside Central Processing, pull the joystick down to move your "cursor" to the menu bar along the bottom. Then, move the joystick to the right, until the "Help" button is selected. Press the joystick button to read help for further instructions.

IMPORTANT NOTES

1) When you select the second icon from the right (the yellow **HOMER MESSAGES** icon), you will be presented with a message with white text on a blue screen. An inaccuracy occurs after you exit this screen, and takes the form of wrong text being displayed in the top section of the screen. This is a cosmetic bug only, and is easy to fix.

Simply choose the **EXIT TO INTERFACE** icon, which is the rightmost icon on the bottom of the screen. This will take you to Portal's dataspace interface. This will NOT affect gameplay and you will be able to continue with the game as normal by pressing **Enter** or the joystick button to re-enter the dataspace.

2)The original Portal on the Commodore 64 used the "Data Crystals" within the game to save and load games. This has been **disabled**. To save and load games, you should use the **File** menu.

Keyboard

The keyboard can be made to act as a joystick. See the **Game Options** section of the help file to change the keyboard configuration.

The following keys are used in this game, and should not be reassigned to the joystick functions:
−The alphanumeric keys are needed to enter your name.

Joystick

The joystick can be used to navigate through the dataspaces, or to control options on the menu bar along the bottom of the screen.

Scoring

There is no scoring in Portal.

Hints

There is an order to the game - that is, you must read certain pieces of information before new messages will appear in the dataspaces. At times, there will be messages that are not central to the story, but are side-plots that you can explore if you desire.

Check with Homer frequently.

Think of Portal as an interactive book, not as a game. Enjoy the story and plot.

Game History

Brad Fregger, Producer

The idea for Portal was born one day when "David Crane and I were having an argument. David said that 'in order for a game to work on a

computer, it has to have some interactive gameplay. The player has to have a direct impact on what's happening. Literature, for example, would never work on a game.' Dragon's Lair, with it's really primitive branching, as far as most game designers were concerned, was awful. I argued that we could bring literature to the computer in a non-linear way that could be very exciting."

The first step Brad took in creating Portal was to call San Jose State University and inquire about a writer to help him with a new computer game project. They referred him to Rob Swigart, a writing teacher who had a keen interest in non-linear literature. In fact, he had already written some non-linear works which were in a very "CyberPunk" futuristic theme.

For Portal, Rob came up with the idea of an astronaut who went away, came back, discovered an empty planet, and explored the main computer system to find out what happened.

Once the story was started, they needed a programmer. They found Gilman Louie and his company, Nexa. At the time, Nexa was a very young computer software company being run out of Gilman Louie's parents' home.

"So we had the team. The original concept was mine, Rob wrote the story, and Gilman was the one who brought the life to Portal. It was Gilman who really created the look-and-feel, invented the 'dataspace' scheme, and so on. In the end, we found that we had developed a masterpiece that was way beyond anything done before."

There were 2 sequels planned as follow-up in the same genre. Unfortunately Portal was not a huge commercial success, and it was decided that the sequels would not work, despite the fact that "Portal got more reviews than any other product that Activision made at the time."

Rob Swigart, Author

"I had written a few non-linear books, such as Little America. My writing is very influenced by Robert Altman, and when Brad [Fregger, Portal's Producer] called me about the idea for Portal, I thought it would be a tremendous opportunity and a lot of fun."

The thing that draws Rob to the futuristic, non-linear genre is that it "moves around in both time and space, and makes linguistic connections to provide cohesiveness. A great example is Kurt Vonnegut's Slaughterhouse 5."

Rob is currently working on a CD-ROM project and novel. He also works for the Institute for the Future, in the Emerging Technologies group. The institute, a non-profit think tank with its roots in the RAND corporation, specializes in tracking and forecasting technology, especially in the communications arena.

Troubleshooting Portal

How to Start

Enter your name and the game begins.

Portal Game Specific Notes

To get started go into the **CP** folder and select help. This will help explain things. Most importantly, remember that Portal is more of an interactive novel than it is a game.

IMPORTANT: When you select the second icon from the right (the yellow **HOMER MESSAGES** icon), you will be presented with a message with white text on a blue screen. An inaccuracy occurs after you exit this screen, and takes the form of wrong text being displayed in the top section of the screen. This is a cosmetic bug only, and is easy to fix. Simply choose the **EXIT TO INTERFACE** icon, which is the rightmost icon on the bottom of the screen. This will take you to Portal's dataspace interface. This will NOT affect gameplay and you will be able to continue with the game as normal by pressing **Enter** or the joystick button to re-enter the dataspace.
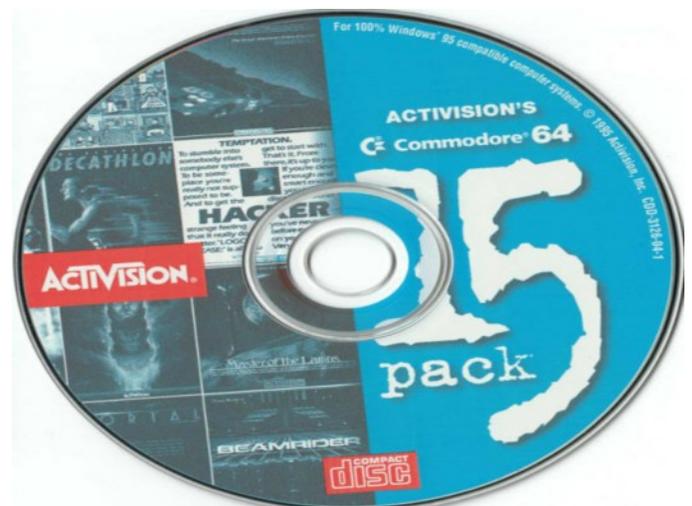
Rock n' Bolt

General Description

You presented your bid. Dazzled the board. And clinched the big contract.

Now comes panic time.

It's an amazing 100-story puzzle of blue-prints, bolts, and beams. It'll take all the high-energy and high-steppin' you've got to make it to the top.

How to Be a Better Builder.

In a word: bolts. Use them skillfully. Be mindful of their color. Flashing green bolts are really good news. Jump on one, and you'll earn an extra man. That's something you always need.

Something you never need is a red bolt. It means you've made an error. A girder is in the wrong place. Better retrace your steps and rethink your work, or you'll never move up in the world.

Your work. It's tough and long. But you're well-paid. Fact is every black bolt you rivet means money in your pocket. You can make over $170 per bolt on the top floors. That's deep pocket material.

Speaking of your pocket book, how does a big fat bonus sound? They don't appear often or in great quantity, but gold bolts are as good as bonuses. Watch for them. They mean big bucks.

The Nuts and Bolts of it All.

Before you awaits the construction world's most complicated, confused mess of mind-boggling blueprints, bolts, beams, and girders.

You and you alone will have to figure it all out and put it all together. And, you don't have all day.

It's a dazzling, dizzying, incredibly exciting high-rise challenge. All 100 floors of it.

You'll spin, leap, and dance your way from beam to beam, puzzle to puzzle. Earn bonus wages and hire extra workers.

So, grab your hat and strap on your boots. You're about to discover how hot music and high energy can help fill a very, very tall order.
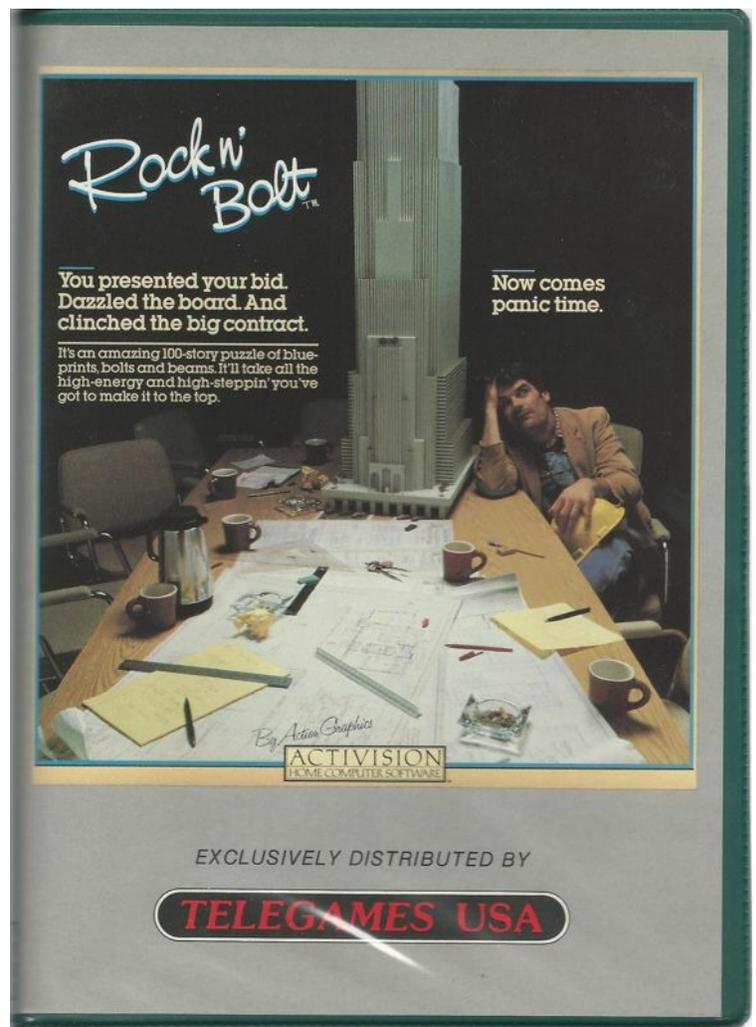
Basics

How to Start:

Once the game is loaded, press the joystick button to bring up the menu screen. Pull back the joystick to choose level, players, and time restriction. Press the joystick button when each selection has been made.

On the Job

To move up, down, left, or right, move joystick in that direction.

To begin each round, hop off the hydraulic lift onto a girder.

To bolt down a sliding girder, position your man directly over the hole and press the joystick button.

To remove the bolt, press the joystick button again.

To call it quits and start over, select **Restart Game** from the **File** menu.

Blueprint

The blueprint shows you the floor plan for each screen. A floor can be from one to three screens wide.

If the blueprint is blank, bolt down the girders in any arrangement you like.

If the blueprint shows the placement of the girders, follow the floor plan precisely.

In either case, make sure you have a way to get back to the hydraulic lift. Then, jump on. It's the only way to continue upwards!

Bolts

Black bolts mean that the girder is in the right place.

Red bolts mean that the girder is in the wrong place.

Flashing gold bolts earn you bonus money if you land on them.

Flashing green bolts earn you an extra man if you land on them.

Men and Wages

One man is all you'll ever need if you choose the untimed option (number 1), but no wages are earned. You start with three men in both timed options (2 and 3). You lose 1 man if you don't bolt down every girder and jump on the hydraulic lift before time runs out. Earn money for each bolt secured, and lose money for every bolt you undo.

Timed option 3 pays better than 2.

Keyboard

The keyboard can be made to act as a joystick. See the Game Options section for information on configuring your keyboard for use as a joystick.

Joystick

Use the joystick to move your on-screen character up, down, left, or right across the beams. To bolt or unbolt a beam, press the joystick button.

Scoring

Points are awarded for each bolt you secure, deducted for each bolt you remove. Bolts are worth more money the higher up you go. You also receive bonus money at the end of each level for any time you may have remaining on the clock.

Hints

Study the floor plan before you start each level. The timer doesn't begin until you move the joystick.

Also, temporarily bolting a girder in the wrong place is often the best way to get to the girders that are not connected to any others. But remember, it takes longer to unbolt than to bolt.

Game History

Rock n' Bolt was designed by a company called "Action Graphics", a development group made up of artists, musicians, programmers, system engineers, and game designers, based in the Chicago area. This diversity and creative mix of talent was very much in tune with the way Activision liked to design their games.

Troubleshooting Rock n' Bolt

How to Start

Press Fire to get the difficulty level screen.
Use up and down controls to change the number.
Press fire to enter the number.
Press fire to enter the game.

Rock n' Bolt Game Specific Notes

We recommend using a joystick for this game. If you need help setting up your joystick see Joysticks Do Not Work in Win95 Troubleshooting below (Pg 52+).

Top Fuel Eliminator

General Description

Six seconds of pure power...

Can you hold 2,500 horses on the strip?

It's down to the final run of the season. You're up against last year's champ, and you two are rated #1 and #2 in the season's point totals. This one will decide it.

The track is fast, and your opponent tough, so you've prepared accordingly. Added just enough nitro, cranked up the blower, and advanced the spark as much as you dare. Will you blow the other guy off the track, or just go up in smoke?

At the split second the Xmas Tree lights change from yellow to green, you put the pedal to the metal. You keep it straight, throw the power shift at just the right moment, and six seconds later, *the title's yours!*

There are new challenges to face every time you climb behind the wheel of *Top Fuel Eliminator*. You're in control in the pits and on the track. Working your way through the 9-event season, you face eight of the top drivers in the world as you try to win the season championship. Each stop means a new round of qualifying and races, with track and weather conditions changing for every run.

You decide how to set up your dragster - engine, clutch, tires, and wing - then run your best race. The lifelike graphics give you a cockpit perspective along with an overhead view. And after each race a performance analysis shows what you did right...or wrong.

Consistency is as important as occasional flashes of brilliance. To win the 9-event season competition, you'll need to be in the running in every event - flash-in-the-pan racing doesn't cut it on *this* circuit.

All the sights, sounds, and gut-wrenching exhilaration of big time drag racing are yours with *Top Fuel Eliminator*. *If* you're up to it.
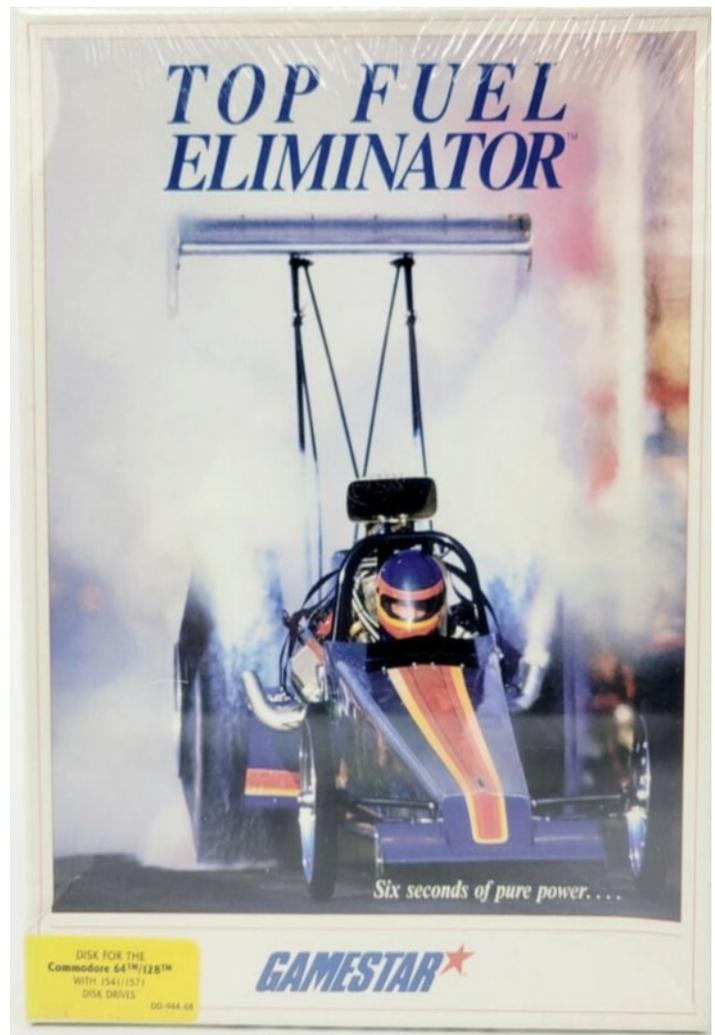
Basics

How to Start

Press fire to enter game.
Use the left and right controls to select your game.
Press fire to start.

Quarter-Mile Madness

You're at the wheel of a 2500-horsepower vehicle specially built to propel you from a dead stop down a quarter-mile track in the shortest possible time. Your reflexes have to be lightning fast because it's like trying to control a rocket skidding along the ground.

Top Fuel Eliminator is a simulation of a complete season of drag racing. The season is composed of nine events scored on a points system.

You'll be competing against eight of the world's best drivers. To win a race, or even make it down the track in one piece, you'll also have to pay close attention to track and weather conditions and adjust

your dragster accordingly. *Top Fuel Eliminator* gives you lots of options that will affect your chances of winning.

Time Trials

You may choose either **Play Game** or **Time Trials**. The Time Trials give you a chance to practice on eight raceways on the Top Fuel circuit. To choose the Time Trials, highlight **Time Trials** in white and press the joystick button. The Pit Area screen will appear.

All your options and procedures for fine-tuning your dragster are just as described in *The Racing Season* below. In addition, you may also choose on which track and event you want to practice. To do so, first push your joystick left or right to highlight the question mark at the bottom right of the Pit Area screen. Press the joystick button, and track information appears for one of the raceways. Push the joystick left and right to cycle through the raceways. When the track you want to practice on is shown, press the joystick button and proceed to set up your dragster as described in *The Pit Area*, below.

During each practice run, you'll have the track to yourself, but you must still take care not to foul or crash. (See *Race Rules*, below.)

When you've finished with your Time Trials practice session, you must restart the game and select **Play Game** to begin the racing session.

Registering to Race

After you choose **Play Game**, you'll see the Registration screen. Here you enter your name. Enter up to eight characters, then press Return.

The Pit Area screen appears, and you're ready to begin the racing season.

The Racing Season

Nine events make up the racing season. They're scheduled in the following order:

1. Winter Nationals
2. North Nationals
3. Spring Nationals
4. East Nationals
5. Summer Nationals
6. South Nationals
7. Fall Nationals
8. West Nationals
9. World Event

Each event is composed of several races: a qualifying round, the first round of eliminations, the semi-final round of eliminations, and the final round elimination which determines the Top Fuel champion for that event. If you don't qualify for a race, or if you lose a race, you're eliminated from that event and *Top Fuel Eliminator* goes on to the next event.

Qualifying

You're given two attempts to qualify for an event during the qualifying round. To qualify, you need not beat your opponent, but you must not commit any fouls (see *Race Rules*, below), and you must beat the posted "bubble time".

The bubble time is the maximum time allowed for the qualifying attempt and is determined by the slowest qualifying speed. There are nine drivers trying to race in each event but only eight are allowed. Therefore, the qualifying time of the eighth fastest driver will be the bubble. If you beat that time, then he is eliminated from the field.

First Round

If you qualify, you'll automatically be placed in the first round. Your opponent will be the one with the closest qualifying time to yours. If you win the race, you advance to the semi-final round. Losers will be eliminated.

Semi-Final Round

Two races involving four drivers are held in this round. The winner of each race will advance to the final round. Losers will be eliminated.

Final Round

Two drivers will race for the event title. The winner is the champion for that event. The loser is the runner-up.

Race Rules

A vehicle may be disqualified from a race for the following reasons:
- triggering a red light by leaving the starting line too early
- experiencing engine failure
- crossing the center line
- crashing

If one car "red-lights" and the other crosses the center line, the car that red-lights will be declared the winner since center line crossing is a more serious offense. By the same reasoning, a crash is more serious than line crossing and will disqualify you first. If two cars commit the same foul, the one who gets to the finish line first wins. If both cars crash, the one that travels the greatest distance wins.

The Pit Area

Each race is preceded by the appearance of the Pit Area screen. It's here, in the pit, that you're presented with playing options for entering the race and for fine-tuning your dragster. The options are designated by icons across the bottom of the screen. Moving the joystick left or right cycles you through the icons, highlighting them as you go. When an icon is highlighted you may select it by pressing the button.

Entering the Race - The Xmas Tree Icon

This is the race icon. Selecting this option puts you at the starting line of the race, so be prepared to put the pedal to the metal before you select it. Once you're at the starting line, there's no backing out. "Xmas Tree" is drag racing parlance for a set of vertically aligned colored lights used to start the race. It appears to the left of your dragster and should be observed carefully. A tachometer appears to the right of your vehicle and should be given equal attention.

The tachometer will first show a rev to an idle of 2000 rpms as the Xmas Tree begins with a staging light. Your dragster will then rev to 5000 rpms, and the Xmas Tree will begin counting down the seconds to the race. Your response time is crucial now, so stay alert. The Xmas Tree will quickly run through a succession of yellow lights and then hit green. This is your signal to go by pressing the joystick button. A race is often won by launching at the precise moment the green light is given. After that, you tear for the finish line with as much speed and driving skill as you can muster.

You must shift gears only once during the quarter-mile race, and you'll need real skill to pick the precise moment to do so. Shifting is accomplished by pressing the button. Your dragster's engine "red-lines" at 9500 rpms, and your engine will blow up, costing you the race, if you don't shift before the tachometer reaches this

mark. However, you must also be careful not to shift too early or you'll never generate enough horsepower to win.

Steering a 2500-horsepower monster in a straight line for just a quarter of a mile is going to be more difficult than you might think. It will probably take some practice before you gain enough skill to compete against some of the better drivers in this game.

Fine-Tuning Your Dragster

You can increase your chances of winning by fine-tuning various components of your dragster. These adjustments are made by selecting other options available on the Pit Area screen. Each of these options has several settings along with a corresponding calibration. Push the joystick left and right to cycle through the available settings. Press the joystick button to select a setting.

Question Mark Icon

This option provides you with track information that's essential in determining what adjustments to make on your vehicle. The track information is of such importance that this option is highlighted automatically whenever the Pit Area screen is accessed. The information changes continually, so it's best to check it before each race and adjust your vehicle accordingly. Logic and experience will dictate what adjustments to make in response to the information.

Clock Icon

Selecting this option allows you to adjust your ignition timing, which is a critical factor in producing horsepower. The higher the number of degrees of advance, the more horsepower will be produced. This introduces a greater possibility of engine failure, though, so set your timing cautiously.

Fuel Can Icon

Selecting this option allows you to adjust the nitro-methane mixture used for fuel in your dragster. This very explosive fuel can be made even more volatile by increasing the percentage of nitro in the mix. This will produce more power but also increase your chances of engine failure. If your

racing opponent is slow, a low nitro mix may be the safer way to go.

Clutch Icon

Selecting this option allows you to adjust the clutch on your dragster. Clutch adjustment allows you to transmit engine power to the rear wheels in a manner most suitable for the track conditions. If the track conditions are good, setting the clutch for high grab will cause the car to accelerate faster. Under slippery track conditions, low grab may be preferable; power will be transmitted to the rear wheels more smoothly, decreasing your chance of spinning your wheels.

Tire Icon

Selecting this option allows you to adjust your tire pressure to suit track conditions. Under slippery conditions, a low tire pressure may provide more traction. Traction is a product of friction and resistance, however, so a low tire pressure may also slow you down a bit, especially on dry pavement. Carefully consider the track conditions before choosing your tire pressure.

Airplane (Wing) Icon

Selecting this option allows you to make a wing adjustment. The "wing" is a wing-shaped device located over the rear wheels of the vehicle. It controls the air's angle of deflection as it passes over the rear wheels. As the angle of the wing increases, the downward force of air on the rear wheels increases, resulting in better traction. However, the amount of drag also increases, which slows the vehicle down a bit. There is no free lunch in physics. You must decide where the advantage lies, based on the conditions described in the track information. For instance, under slippery conditions, you would probably benefit from a high wing angle as it would keep the wheels from spinning excessively.

Engine Icon

This option allows you to adjust the supercharger speed. A supercharger is basically a big air pump that forces the air and fuel mixture into the engine under pressure, greatly increasing engine performance. Increasing the supercharger speed,

and thus the pressure, increases the amount of horsepower the engine is capable of producing. However, there is a greater danger of engine failure when too much pressure is forced into the engine. As with the other vehicle adjustments, use this one with discretion.

The major factors for determining horsepower are fuel mixture, ignition timing, and supercharger speed. You'll learn from experience how to deal with these variables for optimum performance. Besides losing a race, there are other indications of a badly set-up vehicle. For example, if you see smoke coming from your wheels in the overhead view of the race, you may want to set up your dragster differently to get better traction.

And the Winner Is...

After each race is completed the following information is displayed:
- A Performance Analysis of your driving in that race.
- A Ladder Chart showing the standing of each driver in the event up to that point.

After each event is completed, the following information is also displayed:
- An Event Points Chart showing the points awarded to you in that event.
- An Accumulated Points Chart showing the points each driver has accumulated up to and including that event.

Performance Analysis

Elapsed Time - your time from starting line to finish line.

Top Speed - the speed you were traveling at the finish line.

Reaction - based on the time elapsed from the moment the Xmas Tree light turns green until you cross the starting line. If you're slow crossing the starting line, your opponent may beat you even though his Elapsed Time is greater and his Top Speed is slower. The winner is the driver who crosses the finish line first, not the driver with the fastest time or speed.

Shift - based on how well you shifted gears. Shifting gears too early does not allow the engine

to develop its full potential of horsepower, which results in a slow Elapsed Time and a poor rating. Waiting too long to shift will cause the engine to over-rev and result in an engine failure. Remember, your engine "red-lines" at 9500 rpms.

Power - an indication of how well you set up your engine in the Pit Area.

Traction - an indication of how well you set up the vehicle in the Pit Area.

Engine Fail - caused by an improper pit set-up or a bad shift.

Crash - either you hit the wall or the engine exploded during a crash.

Red Light - if you leave the starting line before the light turns green, you may be disqualified from the race.

At the bottom of your statistics chart a message displayed indicates whether you're: Qualified, Not Qualified, Disqualified, Eliminated, or a Winner.

Ladder Chart

At the end of each race a ladder chart appears to illustrate each driver's standing in that race. If you qualified for the race, your name will first appear among the eight names listed to the left of the ladder chart that appears after the qualifying session. Pay close attention to which driver you're going to race in the first round and each subsequent round. As you'll learn through experience, some drivers are faster than others, so you'll want to set up your vehicle in the Pit Area accordingly.

If you win the subsequent elimination rounds of an event your name will advance to the right, toward the final round that determines Top Fuel honors.

Events Points Chart

After each national event is completed an "events points" chart is displayed. Points are awarded in four categories as follows:

Qualifying Category:

Fastest	8 points
2nd	7 points
3rd	6 points
4th	5 points
5th	4 points
6th	3 points
7th	2 points
8th	1 point
Not Qualified	no points

Contestant Category:

Each contestant gets 100 points for entering the event.

Award Category:

Winner	800 points
Runner-Up	600 points
Semi-Finalist	400 points
First Rounder	200 points
Not In Race	no points

Season Points Chart

The Season Points Chart is displayed immediately after the Event Points Chart. It shows the total points each driver has accumulated up to and including that event.

The End of the Season

At the completion of the nine events Top Fuel Eliminator displays your standing for the season among all nine drivers. You may then begin a new season.

Keyboard

You can use the keyboard as a substitute for a joystick. See the *Game Options* section for help configuring your keyboard settings

The following keys are used in this game, and should not be reassigned to the joystick functions:
    –The alphanumeric keys are used to enter your name.

Joystick

To start the race (when the green light is illuminated), press the joystick button. Shift before your tachometer reaches 9500 rpms by pressing the joystick button. Steer your car by moving the joystick in the direction you wish to drive - left or right.

Scoring

Qualifying Category:

Fastest	8 points
2nd	7 points
3rd	6 points
4th	5 points
5th	4 points
6th	3 points
7th	2 points
8th	1 point
Not Qualified	no points

Contestant Category:

Each contestant gets 100 points for entering the event.

Award Category:

Winner	800 points
Runner-Up	600 points
Semi-Finalist	400 points
First Rounder	200 points
Not In Race	no points

Hints

Pay extremely close attention to the track conditions, as well as who you're racing. When setting up your car, it is important to take both into account.

Game History

At the inception of the Commodore's popularity, a game designer named Scott Orr recognized the lack of quality sports games on the market for the new, powerful home computers. Rather than waiting for someone else to develop them, he started a company called Gamestar in 1982. The company grew quickly, releasing 3 hit products in its first year alone, most notably **Star League Baseball**. Scott's brother Keith was the company's first employee, in charge of customer service, manufacturing, and other operations aspects of the business.

According to Scott, **Top Fuel Eliminator** was meant to be a "quickie game, inspired by the Activision Atari 2600 game 'Dragster'. It wasn't a core Gamestar product, it was just a one-shot deal. Still, it ended up getting exceptional reviews, so I imagine that's proof that we captured the realism of drag racing pretty well. Since it's a drag racing simulation, it's inherently limited as a driving game, however it was very new and different in the world of Pole Position and Enduro."

"It was remarkably involved for the games at the time. We basically added a tremendous level of detail before it became the industry standard. If you look around at games that are being released now, the emphasis is on detail and the realistic simulation of an experience."

"The original design was for a two player head-to-head. But because we were, per usual, on a tight schedule, we needed to drop certain features in order to tune gameplay. The emphasis at Gamestar was always to put out games that were fun, and to do so, we needed to tune the games, rather than add more features that took away from that fun. So we just plain ran out of time at the end of the project."

Activision soon saw the potential for a sports game company, and entered into a distribution agreement in 1984, making Gamestar the first affiliated label in the business. Two years later, Scott sold Gamestar to Activision, to expand the company using Activision's resources.

Scott tells us "the emphasis for Gamestar games was always gameplay and the 'fun factor'. Someone could come up with an idea to make it more realistic, but if it wasn't cool and it wasn't fun, it didn't go in. We tried to capture the essence of the sport. The Gamestar emphasis was on having fun. We wanted realism and depth, but the priority was fun." The heart of drag-racing is the precision and care with which the cars are set up and race, and this was stressed in **Top Fuel Eliminator**.

Gamestar produced many quality sports games, such as **Championship Baseball**, **GBA Championship Basketball**, **GFL Championship Football**, **Star League Baseball**, **Starbowl Football**, and **Baja Buggies**, the first racing game to feature a scrolling background.

Troubleshooting Top Fuel Eliminator

How to Start

Press fire to enter game.
Use the Left and Right controls to select your game.
Press Fire to start.

Top Fuel Eliminator Game Specific Notes

During a race, the road may seem to freeze and it may appear that you are not moving at all. This is caused by having animation set closer to **Fastest**. By doing this, a few frames of the animation will drop out, and it will appear as though the road has frozen. In fact, the game is still going and you are able to steer your dragster down the track. To prevent this from happening, move your **Animation** bar in the **Game Options** section under the **Settings** menu towards **Smoothest**. Also, the screen may flicker at the end of a race when the **Animation** bar is set to **Fastest**.

Toy Bizarre

General Description

It's a living

Pop balloons. Catch toys. This much sounds easy.

Did they tell you first to hurdle toys and make them glow?
They mentioned these robot Hefty Hildas?
"No?", you might ask.

And turning off valves, they brought that up?
Well, turn them off.

You should know to take Coffee Breaks whenever they come around.
Floating Faces, too. An extra life is a nice thing, not to be sneezed at.

Maybe it's time you should be beginning?

A Little Something Special For You!

Toys! Your favorites! And you thought I forgot. Only this is real different. In this game, you catch the toys, or they catch you. You'll like the robot dolls, and you'll love the Safety Check. Coffee Breaks, too; they rev you up, just like the real thing! And there are valves and Piston Platforms and a skipping skeleton and....well. I don't want to give it all away! Anyway, saw this and thought of you.

Heh! Heh! Heh!
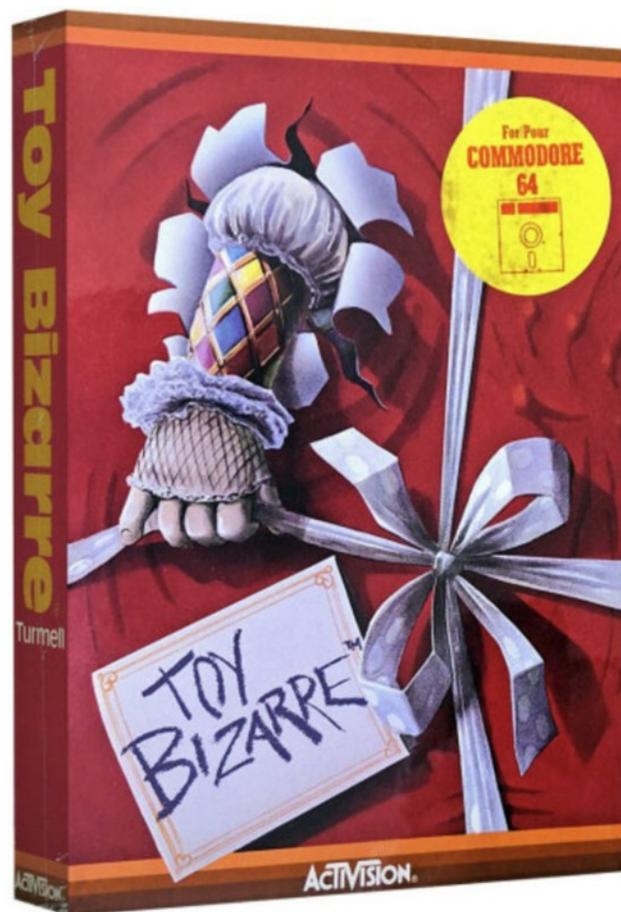
Guarantee

This toy is guaranteed. Guaranteed to pull you in - and **keep you**. Guaranteed to have you moving at manic speeds. Guaranteed to put you through your paces.

Once people played with toys. Now dawns the day when toys have **their** way, and play with people. **You**, for example.

Guide Merton the Maintenance Man through a

night at the Gizmoe Automated Toy Works. If you can. If you Dare!

The toys are in revolt, and Merton's got trouble. Balloons fill up at valves. Turn the valves off - but watch out for Hefty Hilda. You don't really want to make her acquaintance. But you will.

Pop the balloons or toys will escape - and make for Merton! (Relax - it's only a game...) If Merton meets Hilda or a toy, his skeleton skips off into the wings. As in angel's wings - get it?

Of course, you **can** stun toys. Jump over them. That's right. A stunned toy glows, so you'll know. Touch it and it's **yours**. Oh, and about Piston Platforms. Should you or Hilda get caught on one, you'll go winging through the roof.

As in goof.

Give you a break you say? Gladly. Touch the cup on a Coffee Break and you'll be trottin' hot. Or reach the Floating Face and find a free life. Safety in numbers.

But not necessarily in Safety Checks. Turn off **all** the valves before Hefty Hilda hits you or - well, it's not a pretty picture. **We guarantee it.**

Basics

How to Start

Press **F1** to start.

Live a Little

Begin with four lives. Acquire an additional life for each 10,000 points earned. Game ends when you run out of lives.

Indicator

A row of balloons (top left) indicates how many balloons are remaining for you to deal with in this round.

Valves

Balloons fill up at valves. If not popped, balloons release toys. Toys work their way to the bottom level where they hop into one of two **IN** bins, only to re-emerge as balloons at an open valve. Of the six VALVES that appear during the regular shift, all but the top two can be turned off. Hefty Hilda turns them back on, so be alert. If all four valves are off at the end of an "hour", you earn 4,000 extra points!

All valves which appear during a SAFETY CHECK can be turned off. The faster you turn them all off, the bigger the bonus.

Piston Platforms

Piston Platforms are paired and appear along runways. Jump on an elevated one and its mate pops up. Toys caught on one as it pops up are stunned for a while. These can be touched without jumping over them. If Merton or Hefty Hilda are caught on a Platform, they disappear up off the screen. Merton loses a life if "popped", or gains 500 points for "boosting" Hilda.

Keyboard

You can use the keyboard as a substitute for a joystick. See the **Game Options** section for help configuring your keyboard settings

Press **F1** to start the game. Press **F5** for a two-player version.

Joystick

Use the joystick to move Merton to the left or right, even in mid-air. To jump, press the joystick button.

Scoring

Close a valve:	40 points
Jump over a toy:	10 points
Pick up a stunned toy:	100 points
Pop a balloon:	200 points
Stun a toy on a piston:	30 points
Time bonus:	50 points / minute left in the hour

Hints

Mark Turmell, Designer and Programmer

"Definitely keep an eye on the valves so you can pop the balloons before the toys come out. Try to stay towards the top of the levels, especially on later waves. The toys start moving so fast that it's much safer to be above them so they don't fall on you."

"Listen, it's important to remember that you can control Merton while he's in the air. Also, the screen 'wraps around'; that is, move off the left side and you'll appear on the right. Careful not to run into toys or Hilda when you do! Enjoy yourselves!"

Game History

Mark Turmell, Designer and Programmer

"Toy Bizarre started as an animation of a man running across the screen. It was based on a really competitive two-player arcade game called 'Mario Brothers' that was in the arcades back in 1984. The first thing I did was write an editor that allowed me to build screens, floors, backgrounds, platforms, and so on. Mario Brothers had a few levels that repeated - Toy Bizarre ended up with about 30 different backgrounds or levels."

The next thing to determine was a theme for the game. "I was into 'cutesy' games at the time, like 'Pengo' and 'QBert'. I had this list of funny names written down, and usually I'd come up with the name of the game first, then develop the game around that. 'Toy Bizarre' was one of the names I had, and the game grew from that. The idea was to develop a game where the action took place in a toy factory, so we added things like balloons, wind-up toys, dolls, and so on."

"I was also into fast action games, where you get into really tight spots and have to blast your way out. One of my favorite games, even to this day, is Robotron 2084. The game designers at Williams Electronics still play Robotron daily. Our machine is set at level ten, and we've all gotten so good, we can still play for half an hour at a time, and get millions of points. It's really amazing - the action and pace of that game makes it really timeless. That's why control is so important in the games I design. Toy Bizarre had really good control, where you could move the character very precisely while he was jumping, and so on."

"Up until around the time Toy Bizarre came out, Activision had been concentrating on Atari VCS and other cartridge-based systems like the Intellivision, Colecovision, and so on. Dan [Thompson] and I had been playing around with the Apple II and C64, so we were used to more of a PC environment. As an interesting side note, Toy Bizarre and Zone Ranger were the first disk-based games Activision ever released. Up until then, it had been all cartridge based. A few people from Activision recognized the potential of the disk-based home-computer-game market and spearheaded an effort to get the company moving in that direction."

One of the negative side effects of putting a game as huge as Toy Bizarre on a cartridge was that it needed to be compressed. "It was originally released in cartridge form as well as disk, but it needed 3 different forms of compression to get it to fit on the cart. That's more compression than I've done on any game since then. Other programmers pulled it apart to see how we fit that much information on a single cartridge." With the program being so deeply compressed, the decompression took a fair amount of time, so "we put in the 'flashing colors' screen at the beginning, where the border flashes colors really quickly, during the 'load time' for the original cartridge. The disk version was just a straight dump of the program's object code, so the flashing intro screen ended up on the disk, but it really didn't need to, since there was room on the disk."

The inspiration for Hefty Hilda "was a game called 'Berzerk', that had a 'smiley face' enemy that came around to clear you off the board at the end of a level. A lot of the games I designed had some sort of enemy who came around to clear you out, or keep you moving during the level. The 'Coffee Break' speed boost was cool, too. That is another game element I use over and over. It showed up as the 'Turbo' button on 'NBA JAM', and as the 'Fast Shoes' in 'Smash TV' - both were coin-op games I designed later for Williams Electronics."

After Toy Bizarre, Mark wrote a game called Fast Tracks - The Computer Slot Car Construction Set for Activision. Shortly thereafter, he left Activision, and took a brief vacation from the game industry. He returned to games a couple years later, working for Hasbro Electronics with other Activision alumni David Pitfall, Little Computer People Crane and Rob Fullup, who worked on Zenji with Matt Hubbard. Hasbro ultimately closed down its video game department, so Mark moved to Williams Electronics in Chicago, where he is currently employed. His coin-op credits include Smash TV, NBA JAM, Total Carnage and the recently released WWF Wrestlemania.

Troubleshooting Toy Bizarre

How to Start

Press **F1** to start.

Toy Bizarre Game Specific Notes

If your animation is set to **Fastest** you will notice graphics flicker, and sometimes the game will not detect collisions. This is caused by frames of animation not being displayed; as a result, the computer doesn't recognize when a collision occurs. You can fix this by moving the Animation bar in the **Game Options** section under the **Settings** menu towards **Smoothest**. If your game is playing slowly, see *Game Too Slow* for some tips on speeding up gameplay.

(see Win95 Troubleshooting Pg 52+)

Web Dimension

General Description

What if a master software designer was also a great musician? And what if he took a whole new look at something like Darwin's theory of evolution - and turned it into a fabulous musical fantasy?

Over one hundred fifty years ago, Charles Darwin developed his theory of evolution.

It's about time somebody made it hip.

A very unique computerized music video with an electrifying evolutionary web rocked by exquisite visual effects and eleven outrageous tunes.

How to Enjoy the Biggest Event Since the Big Bang

To fully appreciate the Web Dimension experience, we suggest you first stretch forth your arms and deftly crack your knuckles (a ritual attributed to early Neanderthal Man).

Then, after the pain subsides, turn off all the lights in your room and turn up your TV. (It's getting fun now, isn't it?)

In the Beginning

A grey web will form before you. Life will spring majestically from it. Atoms, amoebas, planets and more. Primitive? Yes. But also, potentially, quite satisfying.

As the atoms and other organisms slide smoothly out along the web, you must attempt to connect with them in just the proper way. If you're successful, even more fantastic creatures and wondrously wild music will be your reward. **If** you're successful.
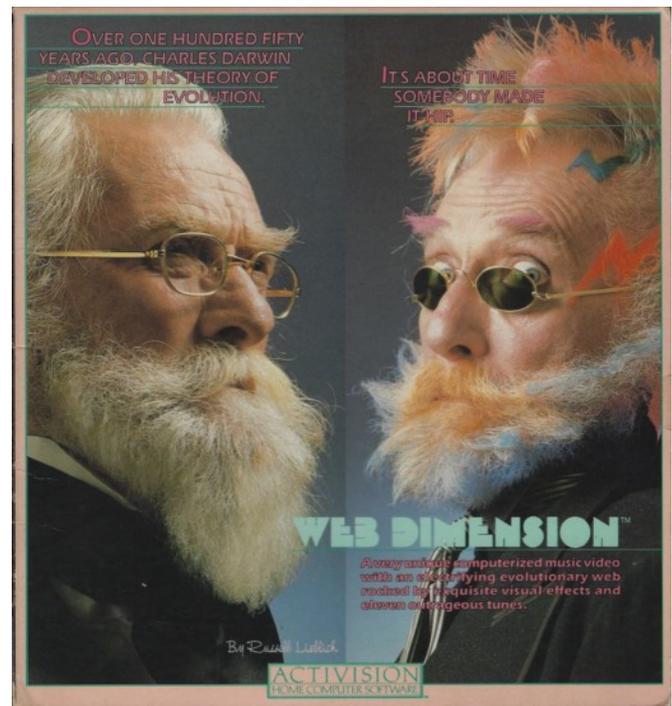
The Missing Link

Yes, there **are** rules to our little electronic universe. However, wouldn't it be much more fun if you took your first steps up the evolutionary ladder all on your own?

So, for now, it will suffice to say that you rendezvous with life at the crossroads of existence (the nodes of the web). But the key is to get there **first**. And then, figure out the rest.

(Just remember how much poor Cro-Magnon Man achieved 30,000 years ago: the wheel. Fire. Cave graffiti. And he didn't even have a 64K RAM PC with a full graphics utility. Let alone printed instructions.)

Evolution of the Blues

If you're clever and cool enough, you'll evolve to the blue web. A world of incredible music and color. Here, organisms live out their days quite differently. Painted paths will appear through time and space.

(The neighborhood has really taken a turn.) Again, connection is the key. But sometimes, and in some places, not touching is even more critical.

But we've said too much already. Experiment. Take your time. This is all new ground. Leading-edge stuff. You'll get there eventually. (But, if you don't, there's always the **How to Play** section.)

Basics

How to Start

Press **F1** to start the game.

The Object

To experience, enjoy, create. There is no beginning, no end, no rules, no lives to be lost, no score to be gained. Watch. Listen. Learn.

Evolve.

It is suggested that you try to figure out the objective, hazards, and rewards of the game without reading these instructions.

The Process

There are eight levels of evolution. Each level has three phases:

Phase 1: Freeze all organisms into energy clusters.

Phase 2: Stabilize all energy clusters.

Phase 3: The transitional phase that moves you to the next level with a musical reward.

Levels increase in difficulty, and the sequence keeps repeating.

The Procedure

Phase 1: Grey Web. Freeze organisms into energy clusters. To do so, arrive at an intersection (node) of web strands before an organism gets there. As it approaches, hold down the joystick button.

Caution: All organisms 'paint over' their paths, but the color disappears when they reach the path's end. Touching a painted path or crashing into an organism when it is **not** at an intersection will set you back to the start of Phase 1.

Phase 2: Blue Web. To stabilize energy clusters, go over them with the fire button pressed. You do not have to be at a node. In this phase, the energy clusters don't paint their paths, but you do. Touching your own painted path will set you back to the start of Phase 2.

Phase 3: Incredible music. Lights. Color. A new epoch is about to begin. Enjoy, because there's level after level of fantastic creatures yearning to evolve from the web.

Keyboard

The keyboard can be made to act as a joystick. See the **Game Options** section for information on how to configure your keyboard for use as a joystick.

Joystick

Use the joystick to move your on-screen character. Maneuvering around the web takes a bit of getting used to at first, as you don't always move in the opposite direction to go back the way you came.

Scoring

There is no scoring in Web Dimension.

Hints

Relax. Enjoy the game. You have as many lives as you need. Evolve at your own pace.

We've found Web Dimension to be an excellent thing to do while on the phone, since there is no pressure to do well. Hey - it beats doodling.

Game History

Russell Lieblich, Designer and Programmer

"Similar to Master of the Lamps, I wanted to create a really trippy sound-light sculpture; in retrospect, a really primitive screen saver. Making a game out of it was an ancillary chore. To the best of my knowledge, nobody was doing anything even like it at the time."

On sound technology then and now: "There was only one sound chip in the C64, the 'SID' chip, which did both sound and music. There was no MIDI back then. All you had was this 4-tone analog oscillator. It could put out a triangle wave, sawtooth wave, pulse, and it had a noise generator, and that was it! Music and sound then was completely table driven, based on an interrupt timer. There was no such thing as a 'MIDI stream' - it was completely macro-driven. In other words, the data was stored as 'Tone=C4, Duration=8th note'. Web Dimension was yet another example of how we did stuff back then that was never done before - looking back on it, to do the sounds and music in Web Dimension without MIDI was quite a feat."

Before joining forces with Activision, Russ spent most of his time studying music. Russ currently owns a recording studio in the San Francisco area, and occasionally works on computer game projects. He plays the keyboard primarily, but is also a professional saxophone player. He also did the music for a CD game called "The Manhole".

From the Web Dimension box:

Russ is a man of music. And science. He has degrees in both. It is from these seemingly opposite interests that Web Dimension was born. And certain scientific theories were, shall we say, updated. (We'd like to think Darwin would have gotten a kick out of it.)

Troubleshooting Web Dimension

How to Start

Press **F1** to Start the Game.

Web Dimension Game Specific Notes

If your animation is set to Fastest, you will notice graphics flicker and sometimes the game will not detect collisions. This is caused by frames of animation not being displayed; as a result, the computer doesn't recognize when a collision occurs. You can fix this by moving the Animation bar in the Game Options section under the Settings menu towards Smoothest. If your game is playing slowly, see _Game Too Slow_ for some tips on speeding up gameplay.

navigation (see Win95 Troubleshooting Pg 52+)

Zenji

General Description

(A Lecture from Rokan, Master of Zenji, 739 A.D.)

Let us call the "Many", the "Elements." Then let us see that in the vast blackness, beyond the beyond, the Elements assemble around the Source. Some are connected, some are not. Those united with the Source are green with energy, while the disconnected ones are an empty grey. The Seeker must connect the Many to the One, thus turning all the Elements green with the power of the Source. In that instant, Zenji occurs.

Basics

How to Start

Press **F1** to start each game. The object is to connect all maze elements, creating an unbroken green path to their pulsating source. Avoid Desires and Illusions, and don't run out of time.

There are 8 variations: Levels 1, 3, 5, and 7 are for one player; 2, 4, 6, and 8 are for two players. The higher the level, the greater the challenge. Press F3 to select game levels.

You are represented by the rotating head. It follows your joystick's movements. To spin an element, bring your head to its center. Now, hold down the joystick button, and move the control stick left or right.
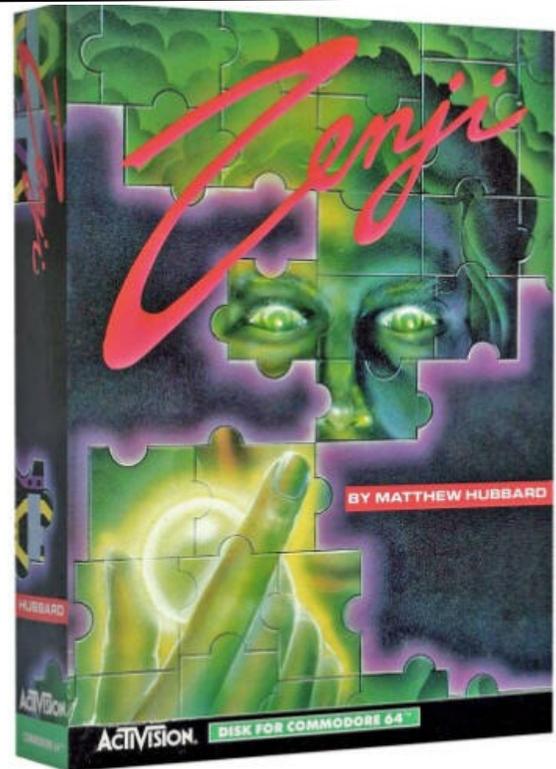
You begin with one active life and four on reserve. The game ends when you have lived out all of your lives.

Keyboard

Function Key	Description
F1	Start new game.
F3	Advance Level.

Press **F1** to start each game. There are 8 variations: Levels 1, 3, 5, and 7 are for one player; 2, 4, 6, and 8 are for two players. The higher the level, the greater the challenge. Press **F3** to select game levels.

The keyboard can be used to act as a joystick. See the *Game Options* section (Win95 Trouble-shooting Pg 52+) for help on configuring the keyboard for use as a joystick.

Joystick

The joystick will move your character up, down, left, and right. To turn a maze element, move to its center, hold down the joystick button and move left to rotate the piece counterclockwise, or right to rotate the piece clockwise.

Scoring

Points are awarded whenever complete connection (Zenji) is achieved. The less time you've taken, the more points you'll get. Whenever contact is made with a numbered square, you'll receive a bonus of 100 points X the number.

A bonus life will be awarded with every other increase of 10,000 points (i.e. 10,000, 30,000, 50,000, etc.).

Caution! If you do not make contact with a numbered square before it's counter reaches zero, the maze piece on that square will disappear. This may make the maze more difficult to complete.

Enter your initials beside your final score by moving the joystick left or right. When desired initial appears, press the joystick button.

Hints

Matt Hubbard, Designer and Programmer

"Zenji creates a unique interaction between player and game. It is a new kind of experience, whose strategy lies not in sharpshooting or elaborate game plans, but in sensing the right move and trusting your intuition."

"The idea is to get one area of the maze 'solved', and then move on from there." Try to 'divide and conquer', working on separate areas of the puzzle individually. Then, to finish the maze, you need only hook one area to it's neighbor, and watch the entire section become green with energy.

"Try forcing the enemies up into an area separate from the rest of the puzzle, then rotate a piece to cut them off, so that they can't reach you. Then, you're free to finish the rest of the puzzle more quickly, without having to waste time dodging enemies. Finally, make a bridge to the last unconnected area where the enemies are trapped to finish the maze."

"The object of Zenji is to connect all Elements to the Source. But, in playing the game, it becomes clear that the approach required is a kind of 'letting go', rather than planning ahead, wherein connections simply happen. Players can 'feel' their way through the maze and use tactics that combine intuition with technical skill. Enjoy."

Troubleshooting Zenji

How to Start

Press **F3** to select game. Odd numbered games are one player and even numbered games are two player.

Press **F1** to start.

Zone Ranger

A Bad, Bad, Bad Night Indeed.
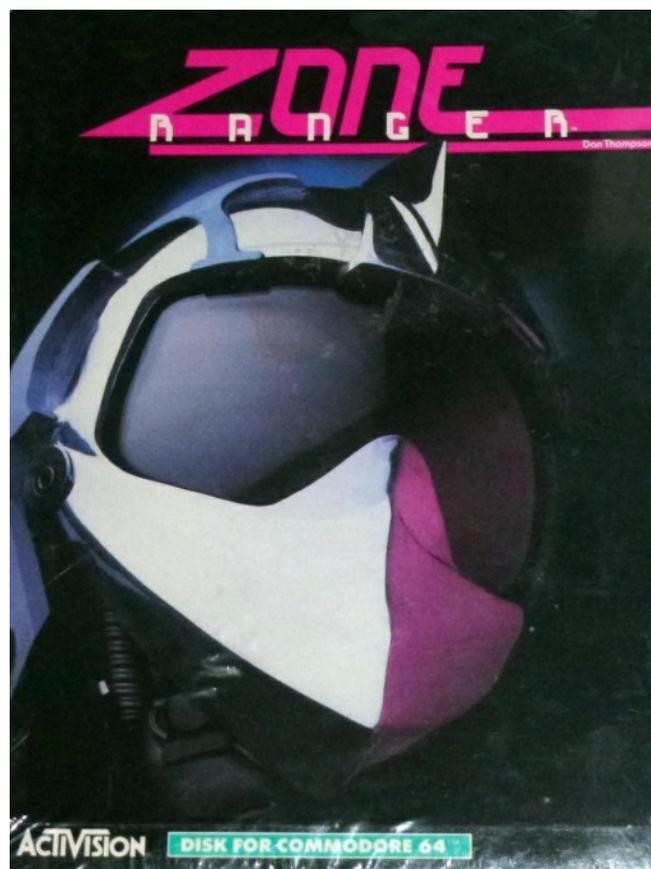
General Description

Screwy Satellites. Irksome Killer Rocks. Irritating Repairbots.

It's a sad and sorry sight. So, clean up the unfriendly skies by blasting all satellites in the allotted time. Or, you're history.

Oooooh, it's ugly. The nasties are out in force. And you're headed straight for a crash course in bad luck. Dead ahead. You've detoured smack into a main drag of sudden violent little boobytraps. Oops.

So, get even. Grit your teeth. Squint. Look mean. Meaner. Your only credo: Smash everything in sight. And stop giggling.

It's a terrible battle. What you strike only multiplies. But lucky for you, even this awful Achilles has a heel. Find the mysterious super-portal and scream into its dreaded inner sanctum. Pull the plug on this devastatingly evil minefield of destruction. For now, that is.

It's up to you. Just remember: Fate calls but once. After that, it's just one very long busy signal.

Basics

How to Start

Press **F3** to select 1 or 2 Players.
Press **F1** to Start.
Zone Ranger has a built-in pause feature. If you press the space bar, it will pause the game. To resume play, press the space bar again.

Cruise Ships

Begin with four and earn one more for every 1000 points earned. Each ship has unlimited fire power.

The Nasties!!

They're everywhere. Colliding with ANY of them will destroy your ship, but a few of them demand special mention.

Satellites - Destroy all sixteen satellites in any level to advance to the next level. Green and red communication beams link the satellites together. Don't let the red beams strike your ship!!

Killer Rocks - Silent, get-in-the-way stuff that just lumber about. Relatively harmless....until you run into one.

Repairbots - When the red alert sounds, enter any warp hole. Then, shoot the repairbot that's fixing to fix up a destroyed satellite.
Boomerangs - The worst. You'll find out. Strictly higher level material.

Any Help Out There?

Warp Holes - A momentary means of escape. Enter and exit as you please.
Sonic Sparklers - Touch them and you'll be invincible for as long as their music plays.
Super Portal - Your only entry into the Inner Sanctum.
The Inner Sanctum - Drop in for free help. Go for the dots.
Skyway Patrol - When you return from The Inner Sanctum, come in contact with the Skyway Patrol. He'll knock off one satellite for every dot you got.
Seventh Dimension - Enter at your own risk. Sure, you'll get more points, but you won't last as long. (Found in level one only.)

Keyboard

You can use the keyboard as a substitute for a joystick. See the *Game Options* section for help configuring your keyboard settings

Press **F1** to start the game. Press **F3** for a two-player version.

Joystick

Pilot your cruise ship by moving the joystick in the desired direction. To fire, press the joystick button.

Scoring

Destroy a satellite: 25 points
Large Killer Rock: 5 points
Small Killer Rock: 2 points
Repairbot: 15 points
Warp to 7th level: brings your score to 7,500 points (no extra cruise ships awarded.)
Boomerang: 15 points

Game History

From the Zone Ranger manual:

"Killer rocks, deadly drones, vicious boomerangs - I know, I know. It's really wicked way out there all on your lonesome. You can't cheat. You can't take shortcuts. And you won't want to give up. But one day, you'll thank me for all of this. And, then again, maybe you won't."

Dan Thompson, Programmer and Designer

"A lot of the basis for Zone Ranger was the free-scrolling shooters that were out at the time. Asteroids and Sinistar were some of my favorite games, and still are. I liked the ability to fly in any direction, as well as the fun involved with massive destruction. I would have to say Zone Ranger was more like Asteroids than Sinistar, but I wanted it to be much more than just shooting rocks."

"As I was writing it, the first thing to materialize was a ship and some rocks floating around. I thought to myself 'Ok, this is a good start. Now, how do I make a game out of it?' As it is sometimes, you just get insight in a flash, completely out of the blue. My inspiration hit me one day, in the shower no less, and *BING*, the satellite grid materialized. I remember thinking instantly 'Yeah - that's it. That's the objective for each level.' From there, the ideas kept coming. Next was the concept of the beams, then the color of the beams - start out green and benign, and later turn into the red killer beams, and so on."

"Once the basic gameplay was in, I needed some aliens. I put the drones in first - the little blue circles. They were good, because they chased you around, but you could outrun them and dodge. They basically just kept you moving, but you could avoid them. We knew that every game had to have a really nasty enemy - somebody to really get your blood boiling. Someone who, when you saw it on the screen, would make you think instantly 'It's him or me'. Even Defender had the Baiter. You knew if you didn't move enough, the big bad guy would come and get you. In Zone Ranger, the big bad nasties were the Boomerangs. Those things were vicious."

"The Inner Sanctum came during the latter part of development. The drones and Boomerangs were done, and I had added the repairbots that travel on the communications beams. I was a big fan of variety, and a single-screen game was boring, I thought. I also like to put a little mystery in the games I design - rather than having the player know everything up front, you have to discover the secrets for yourself, which of course is a big thing now, like hidden moves, and so on. For example, I had done a game called Repton for Sirius Software. In Repton, once the enemies finish their base, you fly to a different screen, and confront them in their stronghold. Maybe the Inner Sanctum came from that. The principle was that you go inside and get a prize, and when you return to the game itself, the prize would help you. Thus, the Skyway Patrol was born. And the maze got more difficult as you went through, so you could get the first 3 diamonds fairly easily, the next 4 were more difficult, and so on. The Skyway Patrol had a flight mechanic so that if you wanted to avoid him, you could. The original placement of the Inner Sanctum was random, so the idea was that if you stumbled across it, you went for it to make your job easier."

"Part of the problem was getting the game to fit into an 8 K cartridge for the home computers. For machines like the Atari 2600, 8 K is a world of space, but for a bitmap machine like C64 or the Atari 800, which Zone Ranger was originally written on, it wasn't much room at all. Bitmaps, even with only 4 colors, take a lot of space. Obviously the game could have been much more if they expanded the specifications and removed the 8 K limit from the beginning, rather than later on."

"The only reason the game was able to grow, the only thing that allowed the sanctum to appear was that the management-types eventually bumped up the limit to 16 K. Since I was initially designing for 8 K, there were certain limitations to deal with. Once they doubled the allowance, I didn't want to just start over, because I had a great game started, and to mess with the design would have lost that. So I just expanded from where I was at the time the best I could. Even with 16 K, though, the Inner Sanctum looks simple because of that memory limitation.

There was no more room for flashy graphics on a second level."

"The original title of the game was 'Warp Wars' because the warp grid was the basis for the game. For whatever reason, marketing didn't like that, so they tried to come up with another title. Their first try was 'Obliterator', which I thought was too big a word for the kids, so I asked them what else they had. That was when they came up with 'Zone Ranger'. Personally, I still like 'Warp Wars'."

"I had been a big fan of the Apple II during High School - still am, actually. Programming was a hobby of mine, and I had written a game on my Apple II at home that was basically an imitation of an arcade game that was one of my favorites at the time. I just kept it at home as a little pet project, until one day when a friend of mine and I went to a computer show in Phoenix. I really didn't think I was a talented enough programmer, but my friend finally talked me into showing it to someone. I just sort of walked up and said halfheartedly 'I've got this game I wrote...Do you want to see it?', and they loved it! They told me to come back the next day, and when I did, they had a contract all drawn up, they advanced me money on the game, and so on. The company was Sirius, and the game turned into Borg. While I was working at Sirius I also did several other originals, such as Repton and Twerps, and some ports of other games. So that was how I ended up in the game industry."

After leaving Activision, Dan did independent contracting work in the gaming industry. He then worked for Hasbro on the Isix project, working on a multi-track videotape-based game with fellow Activision alumnus Mark Turmell. He then moved on to Accolade. After many busy years there, Dan has recently moved to Williams Electronics in Chicago, where he is once again working with Mark Turmell. Console fans will remember Dan's Sega Genesis hit **Hardball**. Currently, Dan is working on the next version of a Williams hit.

Troubleshooting Zone Ranger

How to Start

Press **F3** to select 1 or 2 Players.
Press **F1** to Start.

Zone Ranger Game Specific Notes
(see Win95 Troubleshooting Pg 52+)

We highly recommend that you have your **Animation** bar set to **Slowest** or the setting next to **Slowest**.
At faster settings there will be serious collision detection problems and graphics flicker. For tips on speeding up gameplay, or an explanation this problem, see *Game Too Slow* or *Objects Are Not Colliding* below.
We also recommend using a joystick. If you need help setting up your joystick, see *Joystick Does Not Work* below.
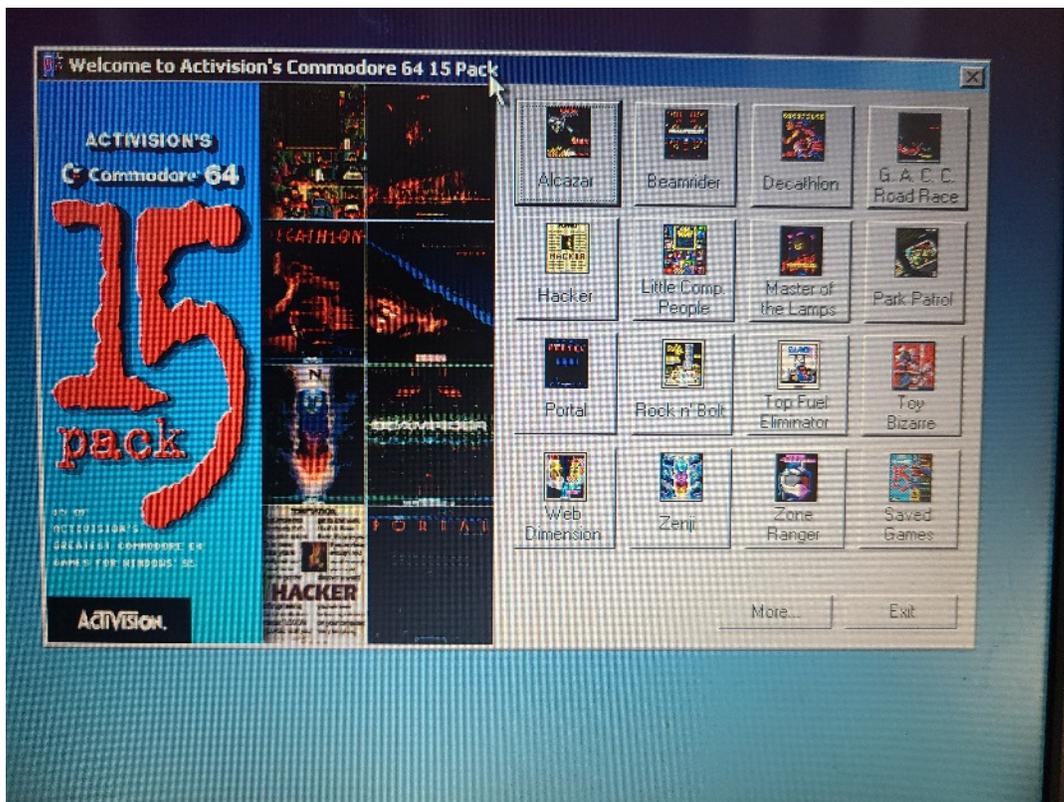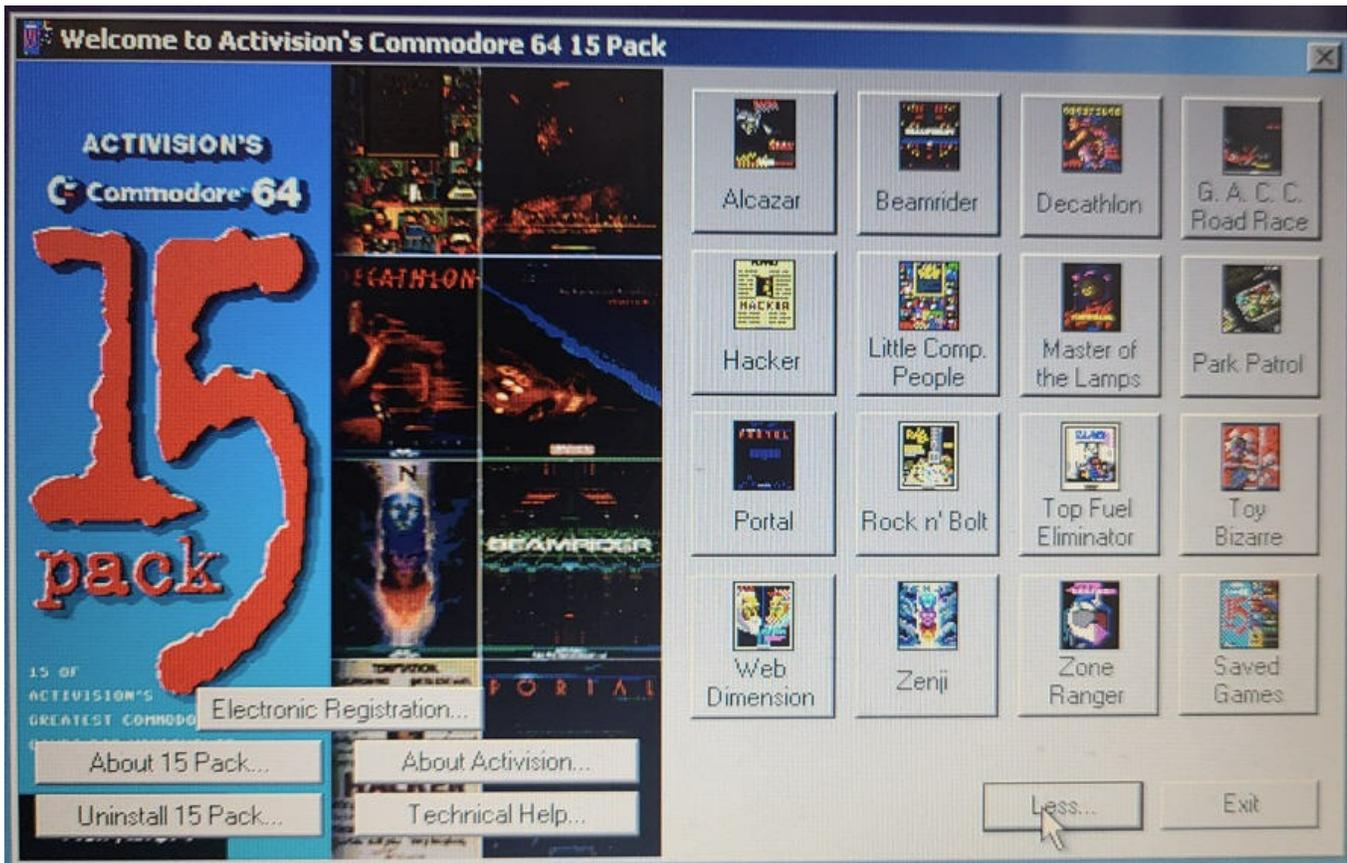
Activision Electronic Registration (North American Users Only)

We would like to thank you for purchasing an Activision product by offering you a chance to win prizes. Please take a few moments to register for your 90 day product warranty and enter our contest.

For simplicity's sake, we have set up three different ways of registration, by MODEM, by FAX, and by MAIL. The information you communicate to us is strictly confidential and will only be released to third-parties with your consent.

Please, one entry per person. Registration is for NORTH AMERICAN USERS ONLY. UK and Australian customers please use the enclosed registration card and select Register Later to exit Electronic Registration. Thank you again.

(buttons)
Register Later
Register Now

Running the Game

Troubleshooting

The following information is intended to help you resolve any difficulties which may occur when running 15 Pack.

15 Pack - Windows® 95 Troubleshooting

Most problems you encounter in Windows® 95 can be solved quickly and easily. We test our games thoroughly on a variety of systems before they are released. However, it is virtually impossible to test on all possible combinations of software and hardware. Many of the problems you might encounter in Windows® 95 are caused by device drivers for video cards, sound boards or CD-ROM drives that are not fully compatible with the Windows® 95 operating system. The following troubleshooting tips are intended to assist you in solving some of the common problems that can occur with the Windows® 95 operating system. If, after trying these solutions, you are still having difficulties, please contact our Customer Support department.

AutoPlay Does Not Function

1.   Make sure your 15 Pack CD is clean and positioned properly in the CD-ROM drive.

2.   Your CD-ROM driver may not be optimized for use with Windows ® 95.

To verify this, perform the following steps:

      1) Open the Windows® 95 Control Panel.
      2) Open the System program.
      3) Click on the Performance tab.

If any of your hardware drivers are not fully optimized for use with Windows® 95, they will be listed here, along with an explanation of what the exact problem is, and suggestions on how to fix it.

3.   Click on the My Computer Icon. In the My Computer folder, select Refresh in the View menu. When the 15 Pack icon appears, double-click on it. This should bring up the 15 Pack title screen. If it does not start the game, but instead gives you a list of the files on the CD, perform the following steps to start the game manually:
      1) Select Run... from your Windows® 95 Start menu.
      2) Type "D:\Launcher.exe /C", where D: is the drive letter for your CD-ROM drive.
      3) Click OK to run the 15 Pack.

Creating a Shortcut

If your CD-ROM drive is not optimized for Windows® 95, perform the following steps to add Activision's Commodore 64 15 Pack to your Start menu:

1.   Select Settings from the Start menu and click on Taskbar....
2.   Select Start Menu Programs and then click Add.
3.   Type "D:\Launcher.exe /C" where D: is the letter of your CD-ROM drive. Click Next.
4.   Select a folder to place your shortcut in or create a new one. Click Next when finished.
5.   Give the shortcut a name, e.g., Activision's Commodore 64 15 Pack, click Finish, and close the Taskbar Properties window.

Activision's Commodore 64 15 Pack is now listed under Programs in your Start menu. Make sure your 15 Pack CD is in the drive when you start the program.

No Sound

1.   There must be a 100% Windows® 95-compatible sound card in your computer.
2.   Make sure your speakers are plugged in correctly, turned on and the volume is turned up to an audible level.
3.   Open the Windows® 95 Volume Control program and verify that none of the various channels are muted or turned all the way down. You can do this by double-clicking on the Speaker icon next to the clock on your taskbar or by selecting Programs - Accessories - Multimedia - Volume Control from the Start menu.
4.   Make sure that Sound under the Settings menu is checked and that Enable Sounds in the Game Options section under the Settings menu is checked.
5.   Adjust the volume setting in the Game Options section screen to the desired sound level.
6.   Close all other applications. Applications that run in the background may not release Windows® 95 sound resources.
7.   Your sound drivers for Windows® 95 may require updating. Check your audio card's installation and its setup parameters within the Device Manager of Windows® 95 to determine if this is the case. To do this, perform the following steps:

      1) Open the Control Panel and double-click on the System icon.
      2) Click on the tab labeled Device Manager.
      3) Click on the plus sign next to the Sound, Video and Game Controllers icon.
      4) Highlight your sound card, then click on the Properties button.
      5) If there are any conflicts they will be listed here with instructions on how to fix it.

8.   Make sure that your sound card is mapped for MIDI sound. You can do this by performing the following steps:

      1) Open the Control Panel and double-click on the Multimedia icon.
      2) Click on the tab labeled MIDI.

3) Select single instrument from the top and select the sound cards installed in your system. If you are not sure, consult you computer manuals or try the different options until you hear sound in the game.

4) Click OK.

For additional help, please refer to your sound card manual and your Windows® 95 manual.

Partial Sound

1.   Adjust the Volume bar in the Game Options section under the Settings menu until a desired sound level is achieved.

2.   Make sure you are using the latest sound driver for your sound card.

3.   Open the Windows Volume Control program and verify that the Wave and MIDI (or Synthesizer) channels are not muted or turned all the way down.

4.   Some sound card companies do not manufacture drivers that take full advantage of Windows® 95 functions. As a result, these drivers will not play all of the original game sounds. There have been particular problems with the compatibility of the Sonic Sound Card Prometheus Aria drivers, Cannon combination cards and Gravis Ultrasound drivers.

Outside World Sounds Are Too Loud

If the outside worlds are too loud it could be that the Wave volume is higher than your MIDI Volume. To fix this problem, go to the Volume Control program. This can be accessed by double clicking on the speaker icon located on your taskbar or by selecting the Volume Control program from the Start menu - Programs - Accessories - Multimedia. Adjust the Wave volume setting down until it is at a level that is satisfactory.

Video Problems

15 Pack requires a Super VGA (SVGA) display at a minimum resolution of 640x480. If you run at a lower or higher resolution than this, you may run into problems. In addition, 15 Pack has been optimized to run with 256 colors. If you run in 16-color mode, the colors in the games will be wrong and you might not be able to see all of the graphics. If you run in modes higher than 256-color,

the colors will look fine but you may run into performance problems with your system. We recommend that all computers less than a Pentium run in 256-color mode. You can see what color mode you are in by right-clicking on your desktop and selecting Properties. Select the Settings tab and your present color mode is listed under Color palette.

If you experience video problems while using this program, you should first make sure you have the latest Windows® 95 drivers for your video card. The Windows® 95 drivers are found on the diskette that came with your video card. If you purchased your video card before Windows® 95 was made available, updated drivers may be obtained in a variety of places. The dealer who sold you your hardware should have access to the most recent video drivers. Most video card manufacturers maintain a BBS containing the latest drivers for free downloading. Drivers are also available on CompuServe, America Online, The Microsoft Network and other popular online services. We have provided a list of video card manufacturers, containing Technical Support and BBS numbers at the end of this document. Please make every effort to install the latest video drivers before calling Activision Customer Support.

Game Colors are Faded in Appearance

Make sure that the video driver you are using supports at least 256 colors. A 16-color driver will produce colors unlike the original games.

Controls Do Not Work

1.   Check the Game Options section under the Settings menu and make sure you are using the correct keyboard setup or joystick controller (in other words, make sure the computer is assigned to the controller that you wish to use).

2.   When choosing a keyboard setup, make sure you have assigned the game controls in the Game Options section under the Settings menu to the keys you are using.

3.   If your joystick control is not working see the Joystick Does Not Work section below.

4.   For other control troubleshooting see the Game Specific Notes section.

Joystick Does Not Work

1. Make sure it is securely plugged into the correct game card. If you have questions on how to do this, please see the documentation supplied with your sound and/or game card.

2. Use the Windows® 95 joystick calibration program to make sure that your joystick is calibrated properly. To do this, go to the Control Panel and click on the Joystick icon. Select the joystick you are using from the menu and select Calibrate to set it. Follow the steps and then exit the Control Panel.

3. If you do not see a Joystick icon in the Control Panel, make sure you have a driver installed. To do so, go to the Control Panel and select System. Select the Device Manager tab and click on the plus sign next to Sound, Video and Game Controllers. Your joystick driver should be listed here. Click Properties to ensure that there are no conflicts. If you do not have a joystick driver installed, or you do not see a plus sign, follow these steps to install a joystick driver:

1) Go to the Control Panel and double-click on Install New Hardware and then click Next.

2) Select No and press Next.

3) From the list select Sound, Video and Game Controllers and press Next.

4) From Manufacturers select Microsoft, and from Models
  select Gameport Joystick, then click Next.

5) Follow the directions to complete the installation of your joystick driver. You will have to restart your computer and then the Joystick icon will be added to the Control Panel.

Game Too Slow

1. If your computer has a turbo button, make sure it is on (or set to the highest MHz possible).

2. Make sure you are running the 15 Pack on a 486 DX2/66 or higher system. A 486/33 or lower system usually will not perform at a comparable speed to the original Commodore 64.

3. Make sure your video driver is running in 640x480 resolution and 256-color mode. A higher resolution with more colors may slow down the games. (You should not run the game in less than 256 colors.)

4. Move the Animation slide bar toward Fastest in the Game Options section under the

Settings menu. This will speed up the gameplay, but will drop out some of the frames so the game graphics may flicker, and it may cause some collision detection problems. See the section Game Specific Notes for more information. For more information on collision problems, see the Objects are Not Colliding section below.

5. Use a smaller-sized window to run the games.

Game Too Fast

1. If your computer has a turbo button, turn it off (or set it to the lowest MHz possible).

2. Move the Animation slide bar to Smoothest in the Game Options section under the Settings menu.

3. Use the maximized window to run the games.

Cannot Play Two Player Game

1. Make sure the game you are playing has a two player option in the "How to Play" submenu under the Help menu.

2. Make sure there has been a controller type chosen for player #2 in the Game Options section under the Settings menu. In some Commodore 64 games, player #2 uses the same controller as player #1 so you do not have to set a second controller type. See Game Specific Notes for more information on two player options.

Objects are Not Colliding (Ex: Shots appear to go through the enemy, or ship flies through walls)

The 15 Pack emulation is only able to detect a "collision" (e.g. a laser hitting a meteor) when it checks certain areas on the screen for such an occurrence. In order to keep the game speed like the original, the emulator only detects periodically for a collision. Because of this, some shots may appear to miss the target. However, the emulator has been set at the optimum setting for each game to reduce the possibility of this happening (and to keep the best speed possible). To reduce these occurrences, set animation speed to Smoothest in the Game Options section under the Settings menu.

Game Objects Blink or Disappear

Some original Commodore 64 games included objects that would blink rapidly to overcome limits of the platform. If blinking becomes apparent, setting the Animation slider bar towards Smoothest should improve the graphics performance.

No Text In The Electronic Registration Window

The color scheme of your Windows® 95 environment is not at its default setting. If the color of message text is set to grey, it will be the same color as the background of this window in 15 Pack. Go into the display section of the Windows® 95 Control Panel and select a different color for your message text.

You Press The Pause Button And A Menu Comes Up On The Bottom Of Your Screen

This will occur with some Packard Bell model computers. It is a feature that Packard Bell has built into their system. There are two resolutions to this problem. First, you can pause a game by selecting Pause from the File menu in each game. You can turn the pause off by clicking on Pause again. Secondly, you can disable this feature. To do so, follow these steps:

1. Click on the Start button and select Find and then click Files and Folders.
2. Type the filename "Fmedia.ini" and click Find Now.
3. Double-click on the the file which is located in the Windows directory or in a submenu of the Windows directory. This will open up Notepad with the file displayed.
4. Look for the line that says "PAUSE_KEY_ENABLE=1". Change the 1 to a 0.
5. Click on Save from the File menu and then exit.
6. Reboot your computer.

This will disable the Packard Bell menu option and allow you to use the Pause key during the game. To restore the use of the Pause, repeat the steps above and change the 0 to a 1. Reboot your computer and the menu feature will be enabled.

The Taskbar Hides a Portion of the Game Window

This can happen if your taskbar is always on top. You can hide the taskbar by right clicking on it and selecting Properties. Click Auto hide and then OK. The taskbar will hide off the screen until you bring your cursor to the edge of the screen and then it will reappear.

How To Add 15 Pack To Your Hard Drive

If you would like to run 15 Pack from your hard drive, perform the following steps (keep in mind that it will take 15 MB of hard drive space to install):

1. Go into Windows Explorer which is located under the Start menu - Programs.
2. Create a new directory on your hard drive by clicking on your hard drive icon and then selecting New - Folder from the File menu. Don't give it the same name as the one for your saved games and preferences.
3. Click on your CD-ROM drive and from the File menu click on Select All.
4. Click and drag the highlighted contents of your CD-ROM drive and drop it into the new directory you've created on your hard drive.

You can now run 15 Pack off of your hard drive by performing the following steps:

1. Select Run... from your Windows® 95 Start menu.
2. Type "C:\mynewfolder\Launcher.exe" /C, where C: is the drive letter for your hard drive and mynewfolder is the name of the folder into which you copied 15 Pack. Note that you should type in everything listed in bold, exactly as shown here, including the open quote before the C: and close quote after Launcher.exe.
3. Click OK to run the 15 Pack.

Error Messages

Commodore 64 15 Pack is designed for 256-color display modes. Running 15 Pack in any other display mode may affect system performance. If you are experiencing degradation in system performance, please reconfigure your display to

256 colors (8-bit). Would you like to see instructions on how to do this?

Your system's Color palette is not currently set to 256 Colors. To change it, click on the Start button located on the taskbar, move the mouse to Settings and select Control Panel. Next, double-click on the Display icon. Click the Settings tab. Adjust the Color palette to 256 Color. Click OK, and then click Yes to restart your computer.

Another way to bring up the Display options dialogue is to click the right mouse button while the cursor is on your desktop, and select Properties. Then select the Settings tab and adjust the Color palette to 256 Color. Click OK, and then click Yes to restart your computer.

Warning! Sound Card Not Detected-No Sound Will Be Heard

See "No Sound" in the Troubleshooting section.

Warning! Cannot locate 22-KHz 8-bit mono wave form output device-no sound will be heard.

See "No Sound" in the Troubleshooting section.

The entire screen turns blue and the following message appears: Error reading CD-ROM in drive

This error message was caused by the CD not being in the CD-ROM drive when 15 Pack tried to perform a task. This error will come up because some of the operations which 15 Pack must perform do not reside in memory; 15 Pack must acquire this information from the CD. To remedy this situation, insert the 15 Pack CD back into the CD-ROM drive and hit the return button (you may need to hit the return button several times) and 15 Pack will automatically return to where it was. In some instances, the CD may activate AutoPlay and the title screen will come back up. If this occurs, your game progress, in all probability, will not be saved. The only exception to this is Little Computer People; 15 Pack automatically saves your progress in this game every few minutes.

This Program has performed an illegal operation and will be shut down.

1. This error message may be caused by the CD not being in the CD-ROM drive when 15 Pack tried to perform a task. This error message will come up because some of the operations which 15 Pack must perform do not reside in memory; 15 Pack must acquire this information from the CD. To remedy the situation, insert the CD back into the CD-ROM drive and click the Close button. 15 Pack will automatically activate AutoPlay and the title screen will come back up. You are now ready to play 15 Pack!

If the blue screen described in the error message above comes up, hit the return key (you may need to hit the return key several times) and 15 Pack will automatically return to where it was. In some instances, the CD may AutoPlay and the title screen will come back up. If this occurs, your game progress, in all probability, will not be saved. The only exception to this is Little Computer People; 15 Pack automatically saves your progress in this game every few minutes

2. This error message may also be caused by a video card that is configured to display more than 256 colors. We experienced this error most commonly with a Paradise Bali 32 ISA card. The display should be reconfigured for 256 colors. Contact your video card manufacturer if your current driver is unable to do this.

3. On slower machines, this error is often caused by having your graphics hardware acceleration set too high. To change this setting, perform the following steps:

1) Open the Windows 95 Control Panel.
2) Open the System program.
3) Click on the Performance tab.
4) Click on the Graphics button.
5) Lower the acceleration speed until 15 Pack loads without an error.

Could Not Save Game Options!

1. This error message occurs if you are playing a game after you have uninstalled 15 Pack. Click Cancel, exit the game and reinstall 15 Pack.

2. This error will also occur if you change the name of the directory you created to save games and preferences. Click Cancel, exit the game and uninstall. Change the name of the directory back to its original name or erase the directory, uninstall 15 Pack and then install 15 Pack again.

This Is Not A Valid C64 File.

1.   This error occurs if you open a saved game and then save the game while it is loading. This happens most often if you are using the F10 key to save games. If this happens your file is most likely corrupted. To prevent this from happening wait to save the game until the game you are loading is completely into memory and you are able to play it.

System Manufacturers

The following is a list of Technical Support and Customer BBS numbers for system manufacturers. Activision has made every effort to ensure that these numbers are correct. However, you may want to consult the documentation for your PC, video card, sound card or CD-ROM drive for more up-to-date information about each company. The first section is for people living in North America. The second section is for people living outside of North America.

Inside North America...

Acer
Technical Support   (800) 733-2237
BBS   (408) 428-0140
BBS   (800) 833-8241

AST Research
Technical Support   (800) 727-1278
BBS   (714) 852-1872

Compaq
Technical Support   (800) 652-6672
BBS   (713) 378-1418

Dell
Technical Support   (800) 624-9896
BBS   (512) 728-8528

Epson
BBS   (310) 782-4531

Gateway
Technical Support   (800) 846-2301
BBS   (605) 323-2224
                         or (605) 232-2109
Download Service   (800) 846-7562

Hercules Computer Technology Inc.
Technical Support   (510) 623-6050
BBS   (510) 623-7449 (V.32 bis)
BBS   (510) 623-7034 (9600 baud)
BBS   (510) 623-7142 (2400 baud)

IBM
Technical Support Multimedia   (908) 329-7131
Technical Support PS/1 PRO   (800) 765-4747
Technical Support Valuepoint   (800) 772-2227
Technical Support Valuepoint   (213) 621-5576

Intel
Technical Support   (800) 538-3373
BBS   (503) 645-6275

Leading Edge
Technical Support   (800) 225-2283
BBS   (503) 836-3971

Micronics
Technical Support   (510) 651-2323
BBS   (510) 651-6837

Packard Bell
Hardware Support   (800) 733-4411
Software Support   (801) 579-0161
BBS   (801) 250-1600
BBS   (818) 773-7207

Tandon
Technical Support   (805) 523-0340

Tandy Computer
Technical Support   (817) 878-6875

Toshiba
Technical Support   (800) 999-4273
BBS   (415) 656-5159

Zenith
Technical Support   (800) 227-3360
BBS   (800) 888-3058

Outside North America...

Acer
Technical Support   USA (408) 434-6677
BBS   USA (408) 428-0140

AST Computers
Technical Support   USA (817) 232-9824
BBS   USA (714) 852-1872

Compaq
Technical Support   USA (713) 378-2000

BBS   USA (713) 378-1418

Dell
Technical Support   France 1-30-60-6900
                           Germany 61-03-971-0
                           Spain 1-32-91080
                           UK 344-860-456
                           Australia 2-930-3355
                           Finland 0-692-3122
                           Ireland 61-304091
                           Poland 644-2525
                           Sweden 8-590-05-100
                           Austria 2243-34100-0
                           Belgium/Luxembourg 2-
466-91-99
                           Netherlands 20-6812666
                           Canada (416) 758-2100
                           Czechoslovakia 2-879250
                           Japan 3-5420-5353

Mexico 5-228-7800
                           Norway 67-125711
                           Singapore 32-08370
                           Switzerland 22-979-0101
BBS   USA (512) 728-8528

Epson
Technical Support   USA (310) 782-0770
BBS   USA (310) 782-4531

Gateway
Technical Support   USA (605) 232-2191
BBS   USA (605) 232-2109

Hercules Computer Technology Inc.
Technical Support   Germany 14-24-910-5
BBS   Germany 14-24-089-8

IBM
Technical Support   USA (404) 238-1234

BBS   USA (919) 517-0001

Intel
Technical Support   USA (503) 264-7000
BBS   USA (503) 264-7999

Leading Edge
Technical Support   USA (508) 836-4800
BBS   USA (503) 836-3971

Micronics
Technical Support   USA (510) 651-2323
BBS   USA (510) 651-6837

Packard Bell
Technical Support   France 1-40-64-1000
                           Germany 89-83-703-1
                           Italy 2-29-52-7444
                           Spain 1-45-80055
BBS   USA (801) 250-1600

Tandon Computer
Technical Support   USA (805) 582-6119

Tandy
Technical Support   UK 922-434-000

Toshiba
Technical Support   USA (714) 859-4273
BBS   USA (714) 837-4408

Zenith
Technical Support   USA (708) 808-5000
BBS   USA (708) 808-2264

Sound Card Manufacturers

The following is a list of Technical Support and Customer BBS numbers for sound card manufacturers. Activision has made every effort to ensure that these numbers are correct. However, you may want to consult the documentation for your PC, video card, sound card or CD-ROM drive for more up-to-date information about each company. The first section is for people living in North America. The second section is for people living outside of North America.

Inside North America...

Advanced Gravis
Technical Support   (206) 881-6945

ATI Technologies Inc.
Technical Support   (905) 882-2626
BBS   (905) 764-9404

Aztech
Technical Support   (800) 886-8879

Boca Research Inc.
Technical Support   (407) 241-8088
BBS   (407) 241-1601

Cardinal
Technical Support   (717) 293-3124
BBS   (717) 293-3074

Creative Labs
Technical Support   (408) 428-6622

BBS   (408) 428-6660

Diamond
Technical Support   (408) 736-2000
BBS   (408) 524-9301

Logitech
Technical Support   (510) 795-8100
BBS   (510) 795-0408

Media Vision
Technical Support   (800) 638-2807
BBS   (510) 770-0968

Microsoft
Technical Support   (206) 637-7096
BBS   (206) 936-4082
BBS   (206) 936-6735

Reveal
Technical Support   (800) 473-8325

Roland US
Technical Support   (213) 685-5141

Turtle Beach
Technical Support   (717) 843-6916
BBS   (717) 845-4835

Outside North America...

Advanced Gravis
Technical Support   France 1-39-73-1534
                           Germany 99-61-507-7
BBS   USA (206) 883-3211

ATI Technologies Inc.
Technical Support   Germany 46-09-077-7
BBS   Germany 46-21-020
                           or 46-09-076-6

Aztech Labs
Technical Support   Germany 11-69-084-3
BBS   Germany 11-69-178-2

Boca Research Inc.

Technical Support   USA (407) 997-7202
BBS   USA (407) 241-1602

Cardinal
Technical Support   USA (717) 293-3124
BBS   USA (717) 293-3074

Creative Labs
Technical Support   France 1-39-20-0421
                           Germany 31-10-283-8
BBS   USA (918) 742-2377

Diamond Computer Systems, Inc.
Technical Support   France 42-20-5959
                           Germany 78-04-023-5
                           Italy 39-25-16-671
                           Spain 1-30-41534
BBS   USA (408) 325-7175

Logitech
Technical Support   France 34-48-9050
                           Switzerland 21-869-9851
BBS   USA (510) 795-0408

Media Vision
Technical Support   USA (510) 770-9905
BBS   USA (510) 770-0968

Microsoft
Technical Support   France 1-69-86-1020
                           Germany 08-93-176-0
                           Italy 39-22-69-121
                           Spain 1-80-40000
BBS   Belgium 2-735-00-45

Reveal
Technical Support   UK 818-457-400
BBS   USA (818) 713-8188

Roland US
Technical Support   Germany 05-26-0009-0
                        Italy 29-35-81-311
                        Spain 3-30-81000

Turtle Beach
Technical Support   Switzerland 22-347-1181
BBS   USA (717) 767-5934

Video Card Manufacturers

The following is a list of Technical Support and Customer BBS numbers for video card manufacturers. Activision has made every effort to ensure that these numbers are correct. However, you may want to consult the documentation for your PC, video card, sound card or CD-ROM drive for more up-to-date information about each company. The first section is for people living in North America. The second section is for people living outside of North America.

In North America...

Actix Systems
Technical Support   (408) 986-1625
BBS   (408) 970-3719

Advanced Integration Research
Technical Support   (408) 428-0800
BBS   (408) 428-1735

Advanced Micro Technology
Technical Support   (909) 598-6120
BBS   (909) 594-5770

Alpha Systems Lab
Technical Support   (800) 576-4275

Altech International
Technical Support   (800) 882-8194
BBS   (408) 946-2227

Artist Graphics Company
Technical Support   (800) 627-8478
BBS   (612) 631-7664

ATI Technologies
Technical Support   (905) 882-2626
BBS   (905) 764-9404

Atlaz Intl., Limited
Technical Support   (516) 239-1854

Boca
Technical Support   (407) 241-8088
BBS   (407) 241-1601

Cache Computers, Inc.
Technical Support   (510) 226-9922
BBS   (510) 226-7486

Cardinal
Technical Support   (717) 293-3124
BBS   (717) 293-3074

Celerite Graphics, Inc.
Technical Support   (510) 226-6390
BBS   (510) 226-7851

Cirrus Logic
Technical Support   (510) 435-8808
Technical Support   (510) 623-8300 (west coast)
Technical Support   (508) 470-3380 (east coast)
BBS   (510) 440-9080

Colorgraphic Communication
Technical Support   (404) 455-3921
BBS   (404) 452-8238

Cornerstone Technology
Technical Support   (800) 562-2552 x306
BBS   (408) 435-8943

CSS Laboratories, Inc.
Technical Support   (800) 966-2771
BBS   (714) 852-9231

Diamond Computer Systems, Inc.
Technical Support   (408) 325-7100
BBS   (408) 325-7175 (14400 baud,
                        8 bits, no parity, 1 stop)
BBS   (408) 325-7080 (2400 baud,
                        8 bits, no parity, 1 stop)

Edge Technology, Inc.
Technical Support   (800) 438-3343

ELSA America, Inc.
Technical Support   (800) 272-3572
BBS   (415) 588-6286

Focus Information Systems, Inc.
Technical Support   (510) 657-4586
BBS   (510) 657-9451

Genoa
Technical Support   (408) 432-8324
BBS   (408) 943-1231

Headland (Video Seven)
Technical Support   (800) 553-1850
BBS   (415) 656-0503

Hercules Computer Technology Inc.
Technical Support   (510) 623-6050
BBS   (510) 623-7449 (V.32 bis)
BBS   (510) 623-7034 (9600 baud)
BBS   (510) 623-7142 (2400 baud)

Identity Systems Technology
Technical Support   (800) 723-8324
BBS   (214) 705-7213

IOcomm Intl., Corp.
Technical Support   (800) 998-8919

Liberty Electronics USA
Technical Support   (800) 497-8324

Matrox Electronics Systems Limited
Technical Support   (800) 462-8769
BBS   (514) 685-6008

Metheus Corporation
Technical Support   (503) 690-1550
BBS   (503) 690-1559

MicroStep, Inc.

Technical Support   (818) 336-8991
BBS   (818) 961-9992

Mirage Computer Systems
Technical Support   (310) 440-1460

National Design, Inc.
Technical Support   (512) 329-5055
BBS   (512) 329-6327

Number Nine Computer Corporation
Technical Support   (617) 674-0009
BBS   (617) 862-7502

Nth Graphics
Technical Support   (800) 624-7552
BBS   (512) 832-1964

Oak Technology
Technical Support   (408) 737-0888
BBS   (408) 524-9014

Orchid Technology Inc.
Technical Support   (510) 683-0323
BBS   (510) 683-0327

Paradise
Technical Support   (800) 832-4778
BBS   (415) 968-1834

Sigma Designs
Technical Support   (510) 770-0100
BBS   (510) 770-0111

SixGraph Computing, Limited
Technical Support   (800) 561-2892
BBS   (514) 336-4169

STB Systems
Technical Support   (800) 234-4334
Technical Support   (214) 234-8750
BBS Phone   (214) 437-9615
BBS   (214) 237-9615

SuperMac Technology, Inc.
Technical Support   (408) 245-0646
BBS   (408) 773-4500

Swan Technologies, Inc.
Technical Support   (800) 468-7926
BBS   (814) 237-6143

Trident Microsystems Inc.
Phone   (415) 691-9211
BBS   (415) 691-1016

Tseng Labs
Technical Support   (215) 968-0502
BBS   (215) 579-7536

Video Logic, Inc.
Technical Support   (617) 494-0530
BBS   (617) 494-4960

Video Seven
Technical Support   (800) 553-1850
BBS   (510) 656-0503
BBS   (415) 656-0503

VidTech Microsystems, Inc.
Technical Support   (800) 752-8033
BBS   (612) 780-3564

Willow
Technical Support   (212) 402-9500

Outside North America...

Actix Systems
Technical Support   USA (408) 986-1625
BBS   USA (408) 970-3719

Advanced Integration Research
Technical Support   USA (408) 428-0800
BBS   USA (408) 428-1735

Advanced Micro Technology
Technical Support   UK 256-811-101
BBS   USA (909) 594-5770

Alpha Systems Lab
Technical Support   USA (714) 252-9200
BBS   USA (714) 252-0624

Artist Graphics Company
Technical Support   UK 844-261-313
BBS   USA (612) 631-7664

ATI Technologies
Technical Support   Germany 46-09-077-7
BBS   Germany 46-21-020-1
                      or 46-09-076-6

Atlaz Intl., Limited
Technical Support   USA (516) 239-1854

Boca Research Inc.
Technical Support   USA (407) 997-7202
BBS   USA (407) 241-1602

Cache Computers, Inc.
Technical Support   USA (510) 226-9922
BBS   USA (510) 226-7486

Cardinal
Technical Support   USA (717) 293-3124
BBS   USA (717) 293-3074

Cirrus Logic
Technical Support   France 1-48-12-2812
                      Germany 15-24-008-4
                      Italy 92-61-34-836
BBS   USA (510) 440-9080

Colorgraphic Communication
Technical Support   USA (404) 455-3921
BBS   USA (404) 452-8238

Cornerstone Technology
Technical Support   Germany 97-44-154-0
BBS   USA (408) 435-8943

CSS Laboratories, Inc.
Technical Support   USA (714) 852-8161
BBS   USA (714) 852-9231

Diamond Computer Systems, Inc.
Technical Support   France 42-20-5959
                      Germany 78-04-023-5
                      Italy 39-25-16-671
                      Spain 1-30-41534
BBS   USA (408) 325-7175

ELSA America, Inc.
Technical Support   USA (408) 565-9669
BBS   USA (408) 565-9630

Focus Information Systems, Inc.
Technical Support   USA (510) 657-4586
BBS   USA (510) 657-9451

Genoa
Technical Support   USA (408) 432-8324
BBS   USA (408) 943-1231

Hercules Computer Technology Inc.
Technical Support   Germany 14-24-910-5
BBS   Germany 14-24-089-8

Liberty Electronics USA
Technical Support   USA (510) 623-6000

Matrox Electronics Systems Limited
Technical Support   USA (514) 685-2630
BBS   USA (514) 685-6008

Metheus Corporation
Technical Support   UK 734-312-112
BBS   USA (503) 690-1559

Micron Computer
Technical Support   USA (208) 463-3444

Mirage Computer Systems
Technical Support   USA (310) 301-4541
BBS   USA (310) 301 4542

Number Nine Computer Corporation
Technical Support   Germany 96-14-491-0
BBS   Germany 96-12-139-0

Nth Graphics
Technical Support   USA (512) 832-1944
BBS   USA 512) 832-1964

Oak Technology
Technical Support   USA (408) 737-0888
BBS   USA (408) 524-9014

Orchid Technology Inc.
Technical Support   France 1-47-80-7050
                      Germany 13-28-007-1
                      UK 256-479-898
BBS   UK 256-463-373

Sigma Designs
Technical Support   Germany 89-33-644-3
BBS   USA (510) 770-0111

STB Systems
Technical Support   UK 818-970-662
BBS   UK 818-971-008

Swan Technologies, Inc.
Technical Support   USA (814) 238-1820
BBS   USA (814) 237-6145

Trident Microsystems Inc.
Technical Support   USA (415) 335-1179
BBS   USA (415) 691-1016

Tseng Labs
Technical Support   Germany 49-00-004-9

Belgium 2-716-50-00
BBS   USA (215) 579-7536

Video Logic, Inc.
Technical Support   UK 923-260-511
BBS   UK 923-271-301

VidTech Microsystems, Inc.
Technical Support   USA (612) 785-9717
BBS   USA (612) 780-8033

Western Digital
Technical Support   USA (714) 932-4900
BBS   USA (714) 753-1234

Willow
Technical Support   USA (718) 402-0203
BBS   USA (718) 993-2066

CD-ROM Manufacturers

The following is a list of Technical Support and Customer BBS numbers for CD-ROM manufacturers. Activision has made every effort to ensure that these numbers are correct. However, you may want to consult the documentation for your PC, video card, sound card or CD-ROM drive for more up-to-date information about each company. The first section is for people living in North America. The second section is for people living outside of North America.

Inside North America...

Hitachi
Technical Support   (800) 241-6558

Mitsubishi
Technical Support   (800) 344-6352
BBS   (714) 236-6286

Mitsumi
Technical Support   (408) 970-9699

NEC
Technical Support   (708) 860-0335
BBS   (508) 635-6328

Panasonic
Technical Support   (800) 222-0584
BBS   (201) 863-7845

Sony
Technical Support   (714) 826-6410 (west coast)
Technical Support   (201) 368-3774 (east coast)
BBS   (408) 955-5107

Teac
Technical Support   (213) 726-0303

Outside North America...

Hitachi
Technical Support   France 1-48-21-6015
                       Germany 40-73-441-0
                       Italy 39-02-30-231
                       Spain 3-33-08652

Mitsumi
Technical Support   USA (415) 691-4465

NEC
Technical Support   USA (508) 264-8000
BBS   USA (508) 635-4706

Panasonic
Technical Support   France 1-49-46-4300
                       Germany 32-18-702-0
                       Spain 7-24-81100
BBS   USA (201) 863-7845

Sony
Technical Support   USA (408) 894-0555
BBS   USA (408) 955-5107

Teac
Technical Support   USA (213) 726-0303
BBS   USA (213) 727-7660

Customer Support in the U.S.

If you have any comments, questions or suggestions about 15 Pack, or any other Activision product, please feel free to contact us through any of the following services.

So that we can better help you, please be at your computer and have the following information ready:

1. Complete product title
2. Exact error message reported (if any) and a brief description of the problem
3. Your computer's processor type and speed

(e.g., 486/66, Pentium 90...)
4. Video and sound card makes and models (e.g., Diamond Stealth 64 video, Sound Blaster 16 sound...)

Online

Services with Activision Forums, E-Mail and File Library Support

1. Microsoft Network: From any MSN window, pull down the Edit menu and select Go To and then Other Location. At the prompt, type "Activision" and click OK.
2. America Online: MEDIAJAKE or use keyword "Activision" to locate the Activision forum.
3. CompuServe: 76004,2122 or [GO GAMBPUB]
4. Activision BBS: (310) 479-1335 Up to 14,400 Baud; Settings: 8 Bits, No Parity, 1 Stop Bit (8, N,1)

Services with E-Mail Support

• Prodigy: ACTI10B
• GEnie: ACTIVISION

Internet

support@activision.com
 or http://www.activision.com

For information on how to use our listserver, please send e-mail to CSbulletins@listserv.activision.com with the word "help" in the subject line. If you're already familiar with listservers, send e-mail to the same address with the word "index" in the subject line of your message for a list of files available from this service.

Fax (310) 479-7355, 24 hours a day.

Mail   Activision, Customer Support, P.O. Box 67713, Los Angeles, CA 90067

Phone   Call our 24-hour voice-mail system for answers to our most frequently asked questions at (310) 479-5644. Or contact a customer support

representative at the same number between the hours of 9:00 a.m. and 5:00 p.m. (Pacific Time) Monday through Friday, except holidays.

Customer Support in the U.K. and Australia

For Technical Support:

In the U.K., please call 0990 143 525.
In Australia, please call (61) 2 869 0955.

If you have any comments, questions or suggestions about 15 Pack, or any other Activision product, you can contact us in the UK on 0181 742 9400 between the hours of 1:00 p.m. and 5:00 p.m. (UK time) Monday through Friday, with the exception of holidays, or contact a customer support representative through the following online services.

Microsoft Network: From any MSN window, pull down the Edit menu and select Go To and then Other Location. At the prompt, type "Activision" and click OK.

CompuServe: 76004,2122 or [GO GAMBPUB]

Internet: support@activision.com or http://www.activision.com

For information on how to use our listserver, please send e-mail to:
CSbulletins@listserv.activision.com with the word "help" in the subject line. If you're already familiar with listservers, send e-mail to the same address with the word "index" in the subject line of your message for a list of files available from this service.

For Technical and Customer Support for the rest of Europe, please contact your local distributor.

Hall of Fame

You can use this dialog box to manually record your high score for each game. You may also enter timed scores. These Top Scores are saved on the hard drive until you uninstall 15 Pack.

Credits

Activision

Associate Producers: Tony Grant
                         Murali Tegulapalle

Production Coordinator: Aaron Cammarata

Documentation Manager: Mike Rivera

Creative Director: Ron Gould

Package Design: Ayzenberg Design and Ron Graening

Writer: Veronica Milito

Audio Manager: Michael Schwartz

Legal Counsel: Larry Goldberg and Richard Hopkins

QA/CS Director: Jon Doellstedt

QA Manager: Dave Arnspiger

CS Manager: Jameson Wang

Senior QA Information Specialist: Sean Lally

Lead Tester: Greg Borrud

Testers: Christopher Crowder, David King, Tyler Scott, Curtis Shenton,
Marty Stratton and Chris Strompolis

Digital Eclipse Software Inc.
            Emulation Technology
President: Andrew Ayre
Programmer: Jeff Vavasour

Special Thanks
Jill Anusavice, Steve Cartwright, David Crane, Stephen Crane, Alex DeMeo, John Dusenberry, Maria Flagg, Brad Fregger, Alan Gershenfeld, Matt Hubbard, Lisa Labon, Russell Lieblich, Tom Loughry, Howard Marks, Tom McWilliams, Pat Moller, Sam Nelson, Scott Orr, Dave Rolfe, Tom Sloper, Rob Swigart, Dan Thompson, Mark Turmell, Henry Yu, Bare Bones Software, Centsible Software, Commodore Country, Computer Bargain Store, Daltronix, EMS Computer Services, Games Plus and Strategic Simulations Inc.

Birth of a Legend

Commodore International Limited was founded in 1958 by Jack Tramiel, a typewriter repairman from the Bronx, New York. It received much of its financing from Canada's Atlantic Acceptance Corporation and quickly grew to include typewriter manufacturing. However, Atlantic went bankrupt in 1965, threatening to take Commodore with it.

To save his company, Tramiel began hunting for a new source of funds. He found it in Irving Gould, a Canadian venture capitalist, who supplied the ailing company with $400,000 in exchange for 17% of the company and Tramiel's pledge of all the receivables.

Price War and the Lean Years

By the 1970's, Commodore Business Machines had grown further, branching into calculators and other office machinery. Business boomed until Commodore lost in a brutal price war with Texas Instruments. Commodore had been assembling pocket calculators with TI microprocessors. The chips cost Commodore about $50 per calculator, and the final product sold for about $100 each. In response, TI came out with a competing calculator of its own manufacture using the same chip that sold for only $49. Commodore lost $4 million on sales of $56 million and nearly sank.

Tramiel learned a valuable lesson. In 1976, Commodore bought MOS technologies, a failing semiconductor manufacturer, for $800,000, ensuring that it would no longer be dependent on outside vendors for needed parts.

Growth

Under Tramiel's deliberate guidance, Commodore grew into a $1 billion company, growing sevenfold from 1981 to 1984. It was one of the largest suppliers of home computers in the world.

Commodore 64 Era

By early 1982, Commodore had five new products in development, one of them being the infamous Commodore 64. Believing he had a winner, Tramiel took a gamble. He sidelined the other products and built up massive inventories of the C64. Then, he flew in the face of the computer industry by enlisting the same mass merchandisers (K-Mart, Toys ``R" Us, Target, and others) that sold the Vic-20 to market the C64. By doing so, he proved that computer buyers didn't need to rely on the hand-holding of an elite class of computer-literate salespeople and their specialty store prices.

The C64 was rushed to market with haste bordering on recklessness, and about 1/4 of the machines shipped didn't work. Commodore's solution was a no-questions-asked policy on the exchange of defective machines. After several months, the defect rate had been whittled down to a more acceptable 4-5%. By 1984, about 4 million Commodore computers were in use around the world, and 300,000 more were being sold per month. However, Commodore's leadership believed that market saturation was still a long way off, since only about 6% of U.S. households owned computers. This was far less than the 20-25% that owned video game players during the peak of the home video game craze.

Tramiel Leaves

Tramiel had been known for his iron-fisted style of management. He was involved with every aspect of the company and anything or anyone he didn't like was changed or removed. This led to a class action suit in November of 1983, which charged that Commodore failed to disclose information about its operations and did not build a strong management team.

According to a statement released in January of 1984, Tramiel said, ``personal reasons prevent my continuing on a full-time basis with Commodore." Gould recruited Marshall F. Smith from Thyssen-Bornemisza NV, a conglomerate based in the Netherlands Antilles, to replace Tramiel.

At the time of Tramiel's departure, the home computer market was failing, causing Mattel and Coleco to leave the business. Another company that decided to leave the industry was Warner Communications, which sold Atari to the newly unemployed Tramiel for a pittance. Shortly thereafter, a stream of Commodore executives followed him.

Smith

In an effort to make Commodore profitable, Smith took to downsizing, cutting the payroll by more than 45%. Though the company had an impressive $339 million in 1985 holiday revenues, it made only $1 million for the quarter after paying off about 1/4 of its bank debt.

Commodore suffered through Fiscal Year 1985, losing $237 million, and getting into trouble with its creditors. The banks granted a much-needed one-month extension on Commodore's loans, and, with the success of the company's second-best Christmas sales ever behind them, Commodore defied the Gods of Bankruptcy yet again.

The Rattigan Years

In March 1986, Thomas J. Rattigan replaced Smith as Commodore's CEO. Rattigan was hired in April of 1985 with the understanding that he would replace Smith, who remained on as a director. Rattigan's objective during the first few months of his leadership was clear - cut costs in order to stabilize Commodore's position, allowing it to rebuild. Once again, the payroll was trimmed from top to bottom, and three plants were closed in five months. New controls were added in the finance department to prevent the sloppy reporting that had undermined Smith's leadership.

Commodore continued to sell respectable numbers of its $150 C64 throughout 1986. The Commodore 128, a successor to and more powerful machine than the C64, was selling for $300 at the time, also helping to keep the company afloat.

Rattigan's policies worked. By March of 1987, Commodore had caught up on its loans and posted a $22 million earning in the quarter ending December 1986. It also had $46 million in the bank, the most cash since 1983, its most profitable year.

Amiga

Commodore's next move was to release the Amiga line of home computers. Code-named `Lorraine' during development, Amiga was quickly dubbed the ``save-the-company machine.'' The Amiga was packed with computing power. At its center was a Motorola 68000, the same chip that powered Apple's original Macintosh.

The Amiga had an additional set of three custom-designed chips, one to handle stereo sound, one for graphics, and one for animation. The Amiga was also one of the first computers to multi-task, performing several different computing jobs at once - such as word processing and game playing.

The Post-Rattigan Years

On April 22, 1987, Rattigan was replaced by Chairman Irving Gould, the venture capitalist who had been involved with Commodore for over 20 years. It is unclear as to why Rattigan was replaced after turning the company around and posting $28 million in profits over the four quarters ending in March 1987. Rattigan himself claimed that he was forced out by Chairman Gould due to personality conflicts and that Gould was upset about Rattigan getting credit for the company's turnaround. Gould argued that the comeback in the U.S. was insufficient compared to its rebound in overseas markets, which accounted for 70% of its sales. In fact, despite its profitability, Commodore's U.S. revenues had declined by 54% in the same four quarters.

According to Gould's ideology, the North American operation was to be a sales and marketing extension of the company, rather than the unwieldy, semi-independent entity it had become. For the third time in Commodore history, a new leader began his term at the helm by drastically downsizing. Under Gould's reign, the payroll was cut from 4,700 to 3,100, including half the North American headquarters' corporate staff, and five plants were closed.

Current

On April 29, 1994, Commodore International announced that it had been unable to renegotiate terms of its outstanding loans and was closing down the business. The liquidation process lasted for months, owing largely to the far-reaching size of the corporation. In addition, the fact that the company was incorporated in the Bahamas while a large share of the creditors were from the United States made legal proceeding tense and drawn out. On April 20, 1995, almost a full year later, Commodore was sold to the German company ESCOM for approximately 10 to 12.5 million dollars.