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# ION ROADWAY

## ENTERTAINMENT

This endurance race requires lightning reflexes  
(ages 6 and up)

**by Jim Sommers**

Requires: One ATARI Joystick Controller

Cassette version (1):  
(APX-10221)

ATARI 410 or 1010 Program Recorder  
16K RAM

Diskette version (1):  
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ATARI 810 or 1050 Disk Drive  
24K RAM

Edition A

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Jim Sommers

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# Introduction

## OVERVIEW

"You, Zarg, foremost landracer in the star system Altheta, are about to face the greatest challenge of your life: to represent Altheta in the Galactic Robot Races. Five ion-cars, each equipped with the most advanced ion energy converters known, are dedicated to your use. You know the stakes: if you win, you'll be set free to race again. If you lose, you and all memory of you, will be erased from every mind in the solar system. Now go!"

During your race, you face an increasing number of antimatter cars. The slightest contact with them will result in an explosion. But your driver ejects into his next waiting car.

Then if avoiding these cars isn't enough, there are black posts along the road, which periodically change to green bonus posts. If you hit these posts, you get bonus points, but hitting one also causes a spin-out, during which you can't control your car.

You can check an information panel at the bottom of the screen for gear, score, the fuel, the platform distance, and the remaining cars.

## REQUIRED ACCESSORIES

One ATARI Joystick Controller

Cassette version

One ATARI 410 or ATARI 1010 Program Recorder  
16K RAM

Diskette version

One ATARI 810 or ATARI 1050 Disk Drive  
24K RAM

## CONTACTING THE AUTHOR

Users wishing to contact the author about ION ROADWAY may write to him at:

P.O. Box 195  
New Galilee, PA, 16141

## Getting started

### LOADING ION ROADWAY INTO COMPUTER MEMORY

1. Remove any program cartridge from the cartridge slot of your computer.
2. Plug your Joystick Controller into the first controller jack of your computer console.
3. If you have the cassette version of ION ROADWAY:
  - a. Have your computer turned off.
  - b. Turn on your TV set.
  - c. Insert the ION ROADWAY cassette into the program recorder's cassette holder and press REWIND on the recorder until the tape rewinds completely. Then press PLAY to prepare the program recorder for loading the program.
  - d. Turn on the computer while holding down the START key.
  - e. When you hear a beep, release the START key and press the RETURN key. The program will load into computer memory and start automatically.

#### If you have the diskette version of ION ROADWAY:

- a. Have your computer turned off.
- b. Turn on your disk drive.
- c. When the BUSY light goes out, open the disk drive door and insert the ION ROADWAY diskette with the label in the lower right-hand corner nearest to you. Close the door. (Use disk drive one if you have more than one drive.)
- d. Turn on your computer and your TV set. The program will load into computer memory and start automatically.



## THE FIRST DISPLAY SCREEN

After the program loads into computer memory, the following display screen appears:

\* ION ROADWAY \*  
COPYRIGHT 1983  
BY JAMES SOMMERS  
(PRESS START)

Figure 1. First display screen

## Playing ION ROADWAY

To start a game, press the START key. You see a diagonal gray road with green grass along the sides and your first yellow ion-powered car parked on a rectangle(the Energy Platform). You also see some red robot cars traveling by every few seconds (if not, then you're in the "stop-action" mode; press the space bar to start the action.)

### STOP-ACTION FEATURE

Press any keyboard key except the BREAK, CTRL, SHIFT, and special function keys to pause and continue the game. This is useful if you must temporarily leave a game while playing.

### SUMMARY OF THE INFORMATION PANEL

The information panel at the bottom of the screen has two rows including the following:

- (a) The GEAR BOX, in the first row on the left, contains the symbols R N 1 2 3 4. A white rectangle highlights the gear you're in.
- (b) The SCORE BOARD, below the Gear Box, has your score. After 999,999 points, it resets to 0.
- (c) The FUEL GAUGE, in the middle of the first row, tells you how much fuel your car has left.
- (d) The DISTANCE GAUGE, below the Fuel Gauge, shows you how far you are from the next Energy Platform.
- (e) The CAR INDICATOR, on the right side, tells how many ion powered cars you have left.
- (f) The HIGH SCORE REGISTER, below the Car Indicator, holds the current high score.

## CONTROLS

(a) Starting your motor:

Press the joystick button to start your motor. Your car rumbles and the car body shakes.

(b) Forward and backward control (parallel to the roadside):

The six gears are defined as:

R = Reverse  
N = Neutral (at rest)  
1,2,3,4, = Forward gears

The slowest forward gear is 1 and the fastest is 4. To travel faster in the forward direction, push the joystick away from you. To slow down, pull the joystick towards you; if you pull back long enough, you switch to reverse and travel backwards. Once you're in the gear you want, you don't have to keep pressing on the joystick.

(c) Sideways control (perpendicular to the roadside):

Move your joystick left or right and the car moves left or right to the road (not on the TV screen).

(d) Combined motion:

Hold the joystick in a diagonal position to combine the results in (b) and (c) above. For example pushing the joystick to the upper right-hand corner will result in the car moving to the right and shifting up one gear.

(e) Bouncing and spin-outs off the roadside:

If you hit the edge of the road in gears R, 1, or 2, then you bounce off. In gears 3 or 4 you spin out. During a bounce or spin-out, you lose control of your car.

(f) Special Platform Area bounce:

If you hit either end of the Platform Area in gears R, 1, or 2, then your car automatically bounces off in the other direction. This feature is useful when you're pulling into the Platform area.

**NOTE.** If you hit the far end of the Platform Area in gears 3 or 4, then your car spins back out onto the road.

(g) Shutting off your motor:

You can shut off your motor only when you're in the Platform Area. Press the red joystick button while you're in gears R, N,

or 1. (To start your motor, press the red button again.)

## THE ENERGY PLATFORM AND ENERGIZING

The Energy Platforms are spaced at equal distance intervals along the left side of the road. Figure 2 below shows how long it takes to travel between Energy Platforms at constant speeds.

The Distance Gauge shows your distance to the next Energy Platform. When it runs out, you still have a little way to go. The absence of trees is another obvious visual clue.

You lose energy as you drive. When it's fully charged, your car has just enough energy to make it to the next Energy Platform if you travel at speed (gear) 4 all the way. At lower speeds you get better mileage. You pass three Energy Platforms. It's to your benefit to pull into the Platform Area as soon as possible, as Figure 2 shows:

<u>Number of platforms</u>	<u>Results after energizing</u>
First platform	5000 bonus points and a replacement car if needed (maximum of 5)
Second Platform	A replacement car if needed
Third Platform	A sigh of relief that you finally pulled in!

Figure 2. Energy platform scores

As for using reverse gear:

(1) As long as any portion of a platform remains on the screen, it counts as the same pass; you can use reverse gear if necessary, without penalty.

(2) Once a platform completely leaves the screen, you cannot return to it (even if you back up to it).

(3) After the third platform passes, you can't go back to the platform at all.



To energize, you must shut off your motor while your car is completely on the Energy Platform. Press the red joystick button as your car passes over the Energy Platform (you must be in gears R, N, or 1 for the red button to work). Energizing begins automatically if you're positioned properly and your motor is off. Check the Fuel Gauge indicator to make sure it climbs. If it doesn't happen, your car isn't completely on the Energy Platform.

## LOSING AND GAINING CARS

You begin with five cars and play until you have none. The Car Indicator on the right side of the information panel has as many circular "car symbols" as you have cars. You lose a car by hitting a robot car or by running out of energy. You gain a car when you reach the first two Energy Platforms and energize. Details of these three cases follow:

(a)

Hitting a robot car:

Your driver ejects, your car sparkles and then explodes, and then the screen is cleared. You lose one car. Your driver parachutes back down to your next car (if you have any left).

(b)

Running out of energy.

Shortly after the Fuel Gauge reads empty, you run out of energy. The empty sign flashes in the Fuel Gauge, and you lose one car. You then start at the last Platform Area you had reached and try again with your next car (if you have any left).

(c)

Replacement cars:

Each time you energize at the first or second platform, you receive one replacement car, unless you already have the maximum allowed: five.

## SCORING POINTS

(a)

Mileage Points:

You score mileage points when you travel in gears 1,2,3, or 4 while you're out on the road. The number of points you score for

a fixed distance depends on your speed. The mileage points are combined with your bonus points for your total score.

(b)

**Bonus Post points:**

The computer randomly changes all the small black posts on the roadside into large green Bonus Posts. If you hit a Bonus Post while you're in gears 3 or 4 (and spin-out), you earn bonus points. You get 3000 points for Bonus Posts on the right side of the road, and 1000 for the ones on the left. The entire Ion Roadway flashes bright white to confirm your bonus.

(c)

**Energy Platform bonus points:**

Each time you energize at the next Energy Platform, you receive 5000 bonus points (in addition to a replacement car if you need one).

**ABOUT THE ROBOT CARS...**

At the start of the game there are only two robot cars. Each time you energize, the number of robot cars increases by one, up to a maximum of ten.

As the traffic increases, you become aware of the four robot car patterns. Each takes at most six seconds to run, and then the program randomly chooses which of the four patterns to do next. The patterns are:

- (1) Pincher: Pairs of cars "pinch" the middle of the road.
- (2) Wall Crusher: All the cars line up along the middle of the road and then sweep from side to side!
- (3) Battering Ram: Several cars are propelled up the middle of the road while the ones along the sides travel slowly.
- (4) Zigzag: Several of the cars zigzag from lane to lane.

## Helpful Tips

(1)

### Handling the traffic:

If you find a dead spot in the traffic, adjust your speed so you can stay there as long as possible. Gear 3 is the safest average speed. If a robot car comes from behind, speed up. If one comes from the front, slow down. When the pressure is too much from both ends, then pick a hole and gun it. Stay in gear 4 until a dead spot shows up again.

(2)

### Bonus Posts:

Go for the Bonus Posts early in the game; ignore them when traffic thickens. If you hit them in gear 3, you lose control for a shorter period of time.

(3)

### Pulling into the Platform Area:

When the trees disappear, try to stay near the left side of the road. When you see the Platform Area, downshift quickly and pull hard to the left until you stop or go into reverse. Take advantage of the Platform Area automatic bounce to help align your car. It's safer to use reverse gear and bounce off the near end. Press the red joystick button as you pass over the Energy Platform. If you pass an Energy Platform, it's best to run out of energy quickly before you get hit by a robot car; that way you only lose one car.

(4)

### Leaving the Platform Area:

As the game goes on, leaving becomes more difficult. Try this. Start your motor and shift to reverse. Just before you bounce off of the end of the Platform Area, press your trigger button to stop your car. Now you have the whole length of the Platform Area to make a run for it!

## Quick Reference Guide

I. Constant speed comparisons while traveling between Energy Platforms (your values will be between the low and high values in each column):

Speed	Time (sec.)	Mileage Points	Energy Required (with some to spare)
1	240	3600	1/4 charge
2	120	5400	1/2 charge
3	80	6000	3/4 charge
4	60	8100	Full charge

"Charge" refers to the length of the bar in the Fuel Gauge.

II. Points: Mileage points	See above
Left Bonus Post	1000
Right Bonus Post	3000
Energy Platform Bonus	5000 (first pass only)

These combine to give your total score shown in the Score Board, which is updated 15 times each second.

### III. Your cars:

Explosion	Lose one car
Out of energy	Lose one car
Energize	Gain one car (first or second platform; maximum of five cars)

### IV. Controls:

(a) Your trigger button works only in the Platform Area in gears R, N, or 1 to turn your motor on or off.

(b) Collision with the road edge:

<u>Gear</u>	<u>Result</u>
R, 1, 2	Bounce
3	1 rev. spin-out
4	2 rev. spin-out

(c) The automatic Platform Area bounce does not work in gears 3 or 4.

V. Press START key to begin new game.







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## Review Form

We're interested in your experiences with APX programs and documentation, both favorable and unfavorable. Many of our authors are eager to improve their programs if they know what you want. And, of course, we want to know about any bugs that slipped by us, so that the author can fix them. We also want to

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1. Name and APX number of program.

Ion Roadway (221)

2. If you have problems using the program, please describe them here.

3. What do you especially like about this program?

4. What do you think the program's weaknesses are?

5. How can the catalog description be more accurate or comprehensive?

6. On a scale of 1 to 10, 1 being "poor" and 10 being "excellent", please rate the following aspects of this program:

- \_\_\_\_\_ Easy to use
- \_\_\_\_\_ User-oriented (e.g., menus, prompts, clear language)
- \_\_\_\_\_ Enjoyable
- \_\_\_\_\_ Self-instructive
- \_\_\_\_\_ Use (non-game programs)
- \_\_\_\_\_ Imaginative graphics and sound

7. Describe any technical errors you found in the user instructions (please give page numbers).

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8. What did you especially like about the user instructions?

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9. What revisions or additions would improve these instructions?

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10. On a scale of 1 to 10, 1 representing "poor" and 10 representing "excellent", how would you rate the user instructions and why?

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11. Other comments about the program or user instructions:

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