

IndyCar Racing II FAQ 1.0

Last Modified: 12 Jan 97

Introduction

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This FAQ is an attempt to answer common questions about the simulation IndyCar Racing II (ICR2), from Papyrus/Sierra On-Line (see a computer store near you for a copy or check out <http://www.sierra.com>).

Send any additions, clarifications, etc. to mcarver@kazart.com

This FAQ will be posted periodically to rec.autos.simulators.

Updates

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12/01/97 Removed reference to Suncom SFX gamepad as it appears to be no longer in production.
 Added information on use of [keys](#) for owners of Rendition bundled version.
 Added [modem](#) initialization string information

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Questions and Answers

- =====
- Q: What are the system requirements?
- A: System Requirements (MS-DOS/Windows)
- VGA
 - Double Speed CD-ROM drive
 - 486DX 33/Mhz or greater
 - 8MB RAM
 - MS-DOS 5.x or 6.x
 - 12MB hard drive space
 - SVGA
 - Double Speed CD-ROM drive
 - 486DX2 66/Mhz or greater
 - 8MB RAM

MS-DOS 5.x or 6.x
12MB hard drive space
Recommended:
Pentium/586 processor
12MB RAM
Joystick or driving wheel/pedal
combo Sound card (no PC speaker support)
Minimum requirements for PC Systems: MS-DOS 5.0+ or Windows 95:
2X CD ROM
DOS:
VGA, 486 DX/33
8MB RAM,
15MB Available hard drive space
SVGA: 486 DX2/66
Windows 95:
Pentium+
16MB RAM
Most sound cards supported.
Recommended:
Pentium 90+
joystick
driving wheel/pedals

System Requirements (PowerPC Mac)
Minimum requirements for PowerPC
Mac: 2X CD ROM
16 MB RAM,
System 7.1+
Power Mac series
15 MB HD space
Recommended:
System 7.5+
Joystick

Q: What versions of IndyCar Racing II are available?

A: The following versions of IndyCar Racing have been released: Version 1.00 (DOS) Original release
Version 1.01 (DOS/Win95) Re-Release (also via patch)
Version 1.02 (DOS/Win95) patch
Version 1.00 (Mac) Original release

There is also a "Rendition" version (DOS ver. 1.02) available as a "bundle" with either the Intergraph Intense 3D 100 (a.k.a. Reactor) or Sierra's Screamin' 3D video cards.

Q: How can I get the latest versions?

A: Here are a list of the patches and their URL's:

icr100_2.exe (DOS, hard drive installation of version 1.0 only!)
1.23M, posted on 07/17/96
ftp://ftp.sierra.com/pub/sierra/patches/sports-sim/icr100_2.exe
Fixes yellow flag problem with race order being corrupted, and understeering problem after driving a long time. This patch upgrades version 1.0 of the game to version 1.2. It will not work with the CD-ROM installation of the game. Please make certain that you are using version 1.0 of the game, as this patch will not work with version 1.1.

icr101_2.exe (DOS, hard drive installation of version 1.1 only!)
216k, posted on 07/17/96
ftp://ftp.sierra.com/pub/sierra/patches/sports-sim/icr101_2.exe
Fixes problem with mouse being automatically selected for controls. Also fixes yellow flag problem with race order being corrupted, and understeering problem after driving a long time. This patch upgrades version 1.1 of the game to version 1.2. It will not work with the CD-ROM installation of the game. Please make certain that you are using version 1.1 of the game, as this patch will not work with version 1.0.

icr2win.exe (Windows 95, hard drive installation of DOS version only!)
4.43 megs, posted on 09/09/96
<ftp://ftp.sierra.com/pub/sierra/patches/sports-sim/icr2win.exe>
Upgrades the DOS version of Indy Car Racing 2 to the Windows 95 version. After executing patch file, run README.BAT for installation instructions. NOTE: You need to install ICR100_2.EXE before you can install this upgrade.

w95icr11.exe (Windows 95, hard drive installation of version 1.0 only!)
218k, posted on 07/25/96
<ftp://ftp.sierra.com/pub/sierra/patches/sports-sim/w95icr11.exe>
Fixes problem of sound in the introduction starting before the video does. Corrects realism settings in 2-player mode. Fixes statistical issues.

indycar2_patch.hqx (Mac version only!)
374k, posted on 10/21/96
ftp://ftp.sierra.com/pub/macintosh_patches/indycar2_patches.hqx
Adds support for Mac Thrustmaster T2 pedals. Game will now automatically unlock the modem configuration file. Fixes crashes during multiplayer racing (system crashes, that is... a

mere patch can't help you driving). Allows Mac version of game to sponsor multiplayer matches which include users of the Windows/DOS versions of the game.

Q: After patching or doing a complete install why can't I update certain files?

A: Need to set attributes of *.txt files in various Tracks directories to turn off read-only.

Q: Is there IPX Network support in ICR2?

A: Sorry, there is not.

Q: What 3-D video cards are supported by ICR2?

A: The "retail" versions of IndyCar Racing II do not support any 3D accelerated video cards. However, a Rendition supported version is bundled with either the Intergraph Intense 3D 100 (a.k.a. Reactor) or Sierra's Screamin' 3D video cards.

Q: What version of ICR2 comes bundled with some Rendition Video cards?

A: ICR2-3D is an "optimized" version of v1.02, but doesn't include a patched paintkit. The patch for the paintkit can be found at:

<http://www.kazart.com/autosim/indycar.htm>

Q: I have the bundled version that came with my Rendition Video card.

What are some of the special keys to control brake bias, etc.?

A: The following information comes from the readme.txt file of the demo version and the manual from the retail version. It is a violation of the Software Ethics Code (section 98:41.5) to use this information if you do not have own a legitimate copy of ICR2. Violators will be persecuted [sic] to the fullest extent of karma!

Driving Views: You can cycle through different views of the car while driving by pressing the F10 key.

Information Boxes : Additional information boxes may be called up by use of the following function keys:

F1 Lap Information - Useful info about position and laps completed.
F2 Standings - up-to-date race standings. Use "<" & ">" to scroll.
F3 Fuels - Shows current fuel and estimated laps. Use "<" & ">" to adjust.
F4 Tires - Shows tire temperature.
F5 Tires - This box shows tire pressure and condition. Space to toggle through tires. Use "<" & ">" to adjust pressure, "Enter" to toggle change in pits, "?" to select compound.
F7 Wings - Too much drag at Michigan? Tell your pit crew to lower those wings. Use "<" & ">" to adjust, "spacebar" to toggle selection.
F8 Wheel Stagger - Tell your pit crew how to stagger your tires. Use "<" & ">" to adjust.
F9 Pit radio - Know what your pit crew is planning at a glance. "spacebar" to toggle repairs on/off.

Turbocharger L = Increased Boost K = Decreased Boost

Brake Bias ' = Move forward ; = Move rearward

Anti-Roll Bars:

Front + = Stiffen - = Soften
Rear] = Stiffen [= Soften

Q: Is there a demo?

A: A DOS demo can be found at:

(DOS) <ftp://ftp.std.com/vendors/papyrus/icr2demo.exe>

(DOS) <ftp://ftp.sierra.com/pub/sierra/demo/icr2demo.exe>

(Win95) <ftp://ftp.sierra.com/pub/sierra/demo/wicr2dem.exe>

(MacBinary)

ftp://ftp.sierra.com/pub/macintosh_demos/IndyCar2_Demo.sea.bin

(Mac BinHex)

ftp://ftp.sierra.com/pub/macintosh_demos/IndyCar2_Demo.sea.hqx

Q: How come I can't get any pit service in the Demo?

A: It's a demo and your pit crew has the weekend off.

Q: How can I turn on some of the missing features in the DOS Demo?

A: Courtesy Neil Jedrzejewski (Note: an editor is also available at:

<http://www.theuspits.com/workshop.html>)

To turn on some of the disabled features in the Indycar Racing II demo you can do the following:

Open the file GAMEOPTS.CFG and using the hex editor change the following bytes.

Offset	Value (hex)	Result
68	01-64	Race distance in %
72	00	PaceCar off
72	01	PaceCar on
89	00	Damage off
89	01	Damage Realistic (great fun)
89	02	Damage Arcade

93	00	Breakdowns Off
93	01	Breakdowns On
97	00	Yellow Flags On
97	01	Yellow Flags Off

The offset is how many bytes into the file the value resides at.
Offset 0 is the first byte, Offset 1 the second and so on.

Before doing this, backup your GAMEOPTS.CFG file by typing COPY
GAMEOPTS.CFG GAMEOPTS.BAK

If you have any problems, delete your GAMEOPTS.CFG file (a new one
will be created next time you run Indycar) or type COPY GAMEOPTS.BAK
GAMEOPTS.CFG

Q: I am running IndyCar Racing II on a 486 DX2 66mhz with 8mb of RAM.
Will adding another 8mb of RAM make a significant difference in game
play?

It runs smoothly in VGA mode but I would prefer to run it "smoothly"
in SVGA. Will 16mb of RAM instead of 8mb help me?

A: For the DOS version it's been stated that the memory (above 8MB) only
increases the length of the replay.

Q: Why are some of the drivers missing?

A: ICR2 is based on the 1995 CART season. Papyrus was unable to get
License Agreements with all teams and Drivers.

Q: Are there updated cars & drivers available?

A: Various 3rd party efforts have been made to provide cars & drivers
for 1995 & 1996. Check any of the following:

<http://www.kazart.com/autosim/indycar.htm>

<http://www.theuspits.com/workshop.html>

Q: I just downloaded a carset, but I can't get it to work?

A: The directory name where you put the new carset must match the name
of the .DAT file. If the .DAT file you downloaded is PPG96.DAT, the
directory name must be PPG96. Also note that the directory must
fall directly under the CARS directory.

Q: Why are there "seams" on the cars I painted? And what about that
"skunk stripe" down the top of the car?

A: You need to patch your paintkit program. You can find the patch at
<http://www.kazart.com/autosim/indycar.htm>

Q: Why aren't the Homestead, Rio de Janeiro, and Indianapolis tracks
included?

A: ICR2 is based on the 1995 CART season. Some of the tracks were
changed in the 1996 season. Papyrus also did not have a License
Agreement with the Indianapolis Speedway.

Q: Is there a Track Pack for ICR2?

A: No, there is not. However, if one legally owns NASCAR Racing or the
Indianapolis Track Pack for ICR1, there are conversion programs for
these tracks. Check <http://www.theuspits.com/workshop.html>

Q: How can I capture a "screen shot"?

A: Press the Print Screen key on your keyboard. A PCX format file will
be created in your ICR2 directory.

Q: How can I run ICR2 in SVGA?

A: When starting the simulation, use the "-h" switch (INDYCAR -H).

Q: I set Announcer to 100%, but I still can't hear any voices during
the game.

A: The only voice one normally hears is Paul Page's during the opening
intro. However, there is an Easter Egg in ICR2. Hint: Don't do
something stupid like running into the Pace Car too fast.

Q: Why is my pit always at the same place?

A: So you can find it in the "heat of the battle". Actually this is
how Papyrus programmed the simulation. Sorry.

Q: My car disappears in the "cork screw" at Laguna Seca. What gives?

A: Read the readme.txt that came with the game. You do read the
readme.txt files, don't you?

Q: The menu just scrolls selections madly. How can control this to
make a selection?

A: It appears that your joystick is out of calibration. Press the "J"
key which will turn off your joystick. Now you can re-calibrate
your joystick or make other selections.

Q: Why can't I get Univbe to work with my ATI video card?

A: You can if you disable the framebuffer. However, this will not give
you any video performance gains. You can try to obtain the latest
VESA BIOS extension driver from ATI (<http://www.atitech.ca>) or try
the latest SciTech UniVBE (now known as Display Doctor) at
(<http://www.scitechsoft.com>).

Q: I am having trouble connecting via modem. Can you suggest any modem
initialization strings?

First check you modem manual and make sure your initialization string has turned of "data compression".

A friend and I recently struggled to get my new 33.6 Dynalink modem talking to his USR Sportster 14.4. We both were using the standard USR init string for the USR Sportster (AT&F...AT&K0&M0) to no avail. Technical support and all data we could find led us to dead ends. However, after some wild guesses, we found that by adding &B1 (Fixed Serial Port Rate) to the end of the string, ICR2 connected and worked well. Hope this may save someone out there some pain and suffering.

Earl Setser

> I've got a USR 28.8 DSVD and can't get the voice side to work. If you
> know how or have a successful modem string please clue me in.

I've submitted a complete write-up on DSVD to Sim Racing News and it should be in there on the next issue. [Editor: His article appeared in the August 1996 issue <http://members.aol.com/simracing/index.htm>]

The summary is this. yes it works and works great, with the following caveats:

Modem string should be: AT&F1&K0SSE=1

It doesn't work with the modem string they ship because it disables error correction and error correction is REQUIRED for DSVD -- unfortunately this means an increase in latency, but its tolerable.

Secondly, you cannot switch from voice to voice/data within the game. The way Papyrus coded the answering mechanism it just doesn't work. You need to set your modem strings as above. Dial using the game, wait until the connection is established and the answering person switches to a track, then lift the handset. I've raced probably 30 times with the DSVD setup and this is the most reliable way to do it.

rmagruder@wpo.borland.com (Randy Magruder)

Q: Can someone tell me what the difference is between the different chassis, engines and tires?

A: From a post to r.a.s. by comalley@iol.ie (GAUNTLET):

Goodyear tyres, the qualifying tire, firestone and goodyear are then basically the same for race lastability. Peneske is the race chassis for non-ovals, Reynard is quicker but harder to drive {less stable rear end}.

Lola is the Oval chassis

Cosworth is the oval engine I think {12,800-13,000 best rev level}

Mercedes probably the best non-oval engine {12,800-13,000}

Honda the best of both worlds engine I believe {12,800-13,200} red lines at 13,500 but I believe it starts losing power after 13,200.

From a post to AOL by Chad255786:

The Chassis, Engines, Tires performance values of the real Indycar World Series are the basis for ICR II.

This means:

Lola: Just slightly the best overall chassis. Best on ovals and superspeedways, slight stability problems on some road courses that affects tire wear and handling over the course of a fuel load.

Reynard: Better than the Lola on road courses, confident, stable on ovals but a little heavier and produces more drag making the lola overall, a better sled.

Penske: I can't figure if Papy setup the Penske to be like the season end Penske which finished EVER so close to Pruett at Michigan or the Chassis that got beat by the Speedway tour bus at Indy. Anyway.

Penske: Solid road course performer where it was easiest of all 3 to handle/ wear tires over the whole season. Sucked on ovals until very late in the season (when the `96 undercarriage and suspension pieces were added) because the car lost so much speed in turns and experienced sometimes violent buffering/handling when in a pack of cars and slipstreaming occurred.

Engines:

Ford: Best overall. Improved low-end torque over the `94 engine package. Solid high-end power for ovals/superspeedways. Prone to more breakdowns than the other engines.(fact in ICR II and real life*****)

Mercedes: Weak at high ends compared to Honda and Ford. Good low range power and better power band than Ford. VERY reliable.

Honda: Okay at low ranges(coming out of turns on a road course) Great, Great top power for the ovals. This engine is the choice of anyone trying to set one lap records at Michigan etc...

Tires:

Goodyear: Good grip, average durability. Best on road courses. not as sticky as the Firestones.

Firestones: Better on ovals than the Goodyears because of their better grip and longer durability (Ask S. Pruett at Indy when he SKIPPED a tire change during the race to get back a lap. Damn impressive) Firestones were good on the road courses but they didn't get a win. No real reason why.

SO: These are the facts relating to the '95 season. I have it on good authority (tech guy at Papy explained this when I call their office recently) that these are the patterns the game will emulate.

Q: I'm having trouble learning some of the Road Courses. Are there any tips?

A: Learning to drive Road Courses:

Okay, I am trying to move on to a road course now; Laguna Seca. I've turned damage off and auto spin recovery one (save some time resetting), but I have left auto brake and auto shift off. I am running the practice pattern with 31 opponents at 80%. Is this the best way to pick up the rhythm of a course?

I find it better to learn the course without any traffic. They tend to throw my rhythm off. Rhythm is the key to road courses. It doesn't hurt to do a session with traffic and then watch the replay from one of the faster cars. This will usually reveal a few tricks.

How to get the timing of the brake and down/up shift correct? Visual clues? Number gears to down shift on the way in? Find a reasonable gear like third for a few bunched up turns? Shift in the turns or always on the straights? I have a lot of trouble shifting and steering turns with one hand. I wish I could shift without taking my hands off the wheel. Whatever happened to HOTAS (hands on throttle and stick)?

I find that is usually unwise to shift in a corner. Look for markers or skid marks for where you need to start your braking. Try to do your heavy braking in a straight line. I shift down as I brake. You will find it helpful to have a little brake on while you start your turn. This puts more weight transfer onto the front wheels. Try to be off the brake as you complete the turn. I look for a gearing that will let me be near the top of the rev range when I come out of the turn and get back on the gas. You may have to change the gearing for a couple of turns. Plan your turn so you can get back in the gas as soon as possible. Generally speaking more time is made coming out of the turns than entering them. The exception is when trying to out brake an opponent to get at the turn first.

Practice -- Practice -- Practice. Find a comfortable setup (not necessarily fast). One that will allow you to make each lap with consistent times. Get the rhythm down and you will find your time will increase. Be smooth! Once you get the course down start playing with your setup for speed. Then it's time to mix it up with some traffic.

Oh, did I forget to mention Practice?!

Q: I'm using a steering wheel. Any tips on setting the steering lock?

A: When you set your car up, reduce the steering lock. Set it so you can make the slowest corner on a road course with about full lock. Then increase the steering lock a degree or 2.

I usually have the steering lock set for 10-12 on road circuits and 8-10 for ovals.

Q: What is the difference between controllers (digital or analog)?

A: I've been using the keyboard for racing in NASCAR with ok results. It seems the biggest problem with buttons though are that they are either ON or OFF. No inbetweens. Question: Are the joy sticks & wheels the same way? I mean for instance if you turn the wheel half way does the car experience say half the wheel lock angle? OR is it done so that the wheels and sticks put out periodic signals that are proportional to the range of movement?

The keyboard (and other digital controllers, such as joystick buttons) causes steering, acceleration, braking and reverse to be applied on an increasing basis. We do not "slam" the wheels left/right, or the gas/brake to the floor. We do it gradually over a period of time (I don't have the code in front of me so I can't say at what rate, but it's short - about a second to full value, I believe).

Analog controllers such as joysticks are interpreted for steering in one of two ways. If you choose linear steering, then the joystick value corresponds linearly to the steering angle; 1/2 left will give you 1/2 left steering. If you choose non-linear steering, then the joystick value is converted to steering angle by a (surprise) non-linear function; again, I don't have the code in front of me, so I can't tell you what the function is.

Rick Genter
Technical Lead, IndyCar Racing II
Papyrus Design Group, Inc.

Q: Any tips on passing strategies?

A: My experience has been that if you are dicing for position, it is the racer behind that must find their way around the other. Blocking is usually tolerated when a fight for position is being engaged. However, if a racer is being lapped, it is considered good racing etiquette to let faster cars by at the earliest opportunity. A lapped racer is not expected to give up his line into a turn for a faster car, but not block that car either on exit, or when trying to pass in the corner. Again, it is still up to the faster car to find their way around. I would expect the same to hold true for racing sims.

Jerry
Purple Lips Racing

Q: Are there any tips on how to setup one's car?

A: Yes, Terje Wold Johansen has prepared an excellent article that appeared in the May 1996 issue of [Sim Racing News](#).

Indycar 2 - General Setup Guide
- by Terje Wold Johansen

To complement this month's track guide for Indycar 2 and to give people a grounding in setting up an Indycar, we needed some basic facts. What ARE each of the setup options? What do they do? How do they complement one another? Below Terje gives an overview of the lesser understood parameters of Indycar setup, and how they affect the car's handling. Take it away Terje....

1. ANTI-ROLL BARS (ARB)

What happens when you adjust the ARBs?

Increasing the front ARB stiffens the front end of the car and increasing the rear ARB stiffens the back. Decreasing them makes each respective end softer. What does softer or stiffer imply?

When a car is said to be soft it has relatively much roll. Roll is experimented when you turn the steering wheel or brake. When turning it depends on the stiffness of the car and the actual weight being transferred (speed, turning radius). Under braking it depends on the speed, stiffness and the brake balance. A soft car will respond slowly to weight transfer while a stiff car will respond quickly. This response time decides how your car handles. Because roll is equal to response more roll equals higher response time and too much roll means that the car will feel sluggish. The opposite of sluggish is too pitch sensitive which often means that the car has been set up too stiff. Apart from the ARBs the shocks play an important part in the stiffness of the car. In ICR2 shocks equal shocks and springs in the real Indycars.

When do I adjust ARB?

Usually you would like to decrease the front ARB if you experiment push in a turn, but you would like to increase the rear ARB if you experiment push when entering a turn. If you have oversteer in a turn soften rear ARB and/or stiffen front ARB. If you have oversteer when entering a turn soften rear ARB and/or stiffen front ARB. If you have oversteer when exiting a turn increase front ARB and/or soften rear ARB. Usually it is pretty easy to find the optimum settings as the car doesn't push into a turn and oversteer while in it and finally understeer when exiting. Usually it is only understeer or oversteer. If you experiment both it is something fundamentally wrong with your set-up and/or your driving.

2. BRAKE BALANCE

The brake balance affects the weight transfer under braking. By moving the balance forward the front brakes will do more of the braking than the rear and hence more weight will be distributed forward than if you didn't. Too little weight transfer to the front may cause the car to swap ends as the rear becomes too heavy. Too much weight transfer forward will make steering difficult because the front tyres lose grip. On tight tracks like Detroit the balance is often moved backwards in order to make the car turn in more under braking. The brake balance is heavily influenced by driving style.

3. CAMBER

Why is it that the temperatures become unequal across a tyre? The unequal temperatures are a function of the weight distribution that takes place when driving through a turn and the general downforce of the car. Changing the camber of a tyre means that we can adjust how much of the tyre we would like to touch the track surface. Camber is essential to how fast you can drive through a turn. Lessening (-) the camber tilts the top of the tyre against the car which is exactly the opposite of what happens when you increase (+) the

camber. The pressure of the tyre is important when adjusting the camber.

If the tyre temperature on the inside is equal to the outside but not equal to the middle you must change the tyre pressure.

Camber heavily affects the braking so the brake balance may have to be adjusted after you have made changes to the camber.

4. STAGGER

You can think of stagger as a compensating factor applied on the right tyres that makes them revolve around at equal speed to the left ones on a banked surface. Adjusting stagger means that you adjust the circumference of the right tyres. More stagger bigger circumference and vice versa.

5. SHOCKS

Shocks decide the stiffness of the car. Softening shocks equal more roll. The car's ability to pick up weight transfer decreases and hence the car will become more sluggish and unresponsive. Too soft front shocks cause oversteer. Too soft rear shocks cause understeer.

Stiffening shocks equal less roll. The car's ability to pick up weight transfer increases and hence the car will become more responsive. Too stiff front shocks cause understeer. Too stiff rear shocks cause oversteer.

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