

Location of parameters - AIW file for the Track

Section of file - [Waypoint]

Slowwhenpushed=1.00

How much the AI will slow when bumped by another car.
If this line is not present, the Game appears to default to 1.00
Which is heavy braking, values of 0.2 - 0.25 recommended

AIRange=(0.1000)

How much variation there is in the AI times around the track.
1.00 seems to be the maximum value

AIDraftStickiness=(1.00)

How close the AI will stick to the racing line. A default value of 1.00 will make the AI follow each other in a nice straight line. Lower values will see a bit of variation and more overtakes. 0.95-0.98 recommended.)
(Values of up to 4.00 seen on some tracks.)
It looks like the value of 4.00 is from Rfactor, 1.00 is the maximum setting for Race07.

AIBrakingStiffness=(1.0000,1.0000,0.9000)

What percentage of the brake power the AI will use. The first value is rear-wheel drive. The second is four-wheel drive The third value is front-wheel drive. A good setting for beginners to lower if they complain about AI crashing into the back of them.

CheatDelta=(0.0000,0.0000,0.0000)

Unknown what this value does, testing is needed.

WorstAdjust=(0.9000)

Used for 70% AI strength option. When the AI difficulty in-game is

set to 70%, this number changes what that difficulty is on this track. Use this to balance the track difficulty. It becomes very important when creating a championship.

MidAdjust=(1.0000)

Used for 100% AI strength option (note that AIs now use full throttle above 95% AI strength option)

BestAdjust=(1.2000)

Used for 120% AI strength option.

Location Of parameters - GDB file for the Track

AI DryGrip = 1.07

Percentage of grip that the AI uses in dry conditions, Mainly effects Corners. The AI will calculate a higher corner speed with higher values. High values of AIDryGrip are not a good fix for tracks where the AI slips off the track on certain corners.

AIWetGrip = 0.80

Percentage of grip that the AI uses in wet conditions.

Attrition = 15

Unknown what this parameter does, testing is needed.

Location Of Parameters - PLR file

File location, Documents\SimBin\RACE 07\UserData\Player Name

Many of the settings in the PLR file in Race 07 reset themselves to default values whenever the game starts. The HDC and RCD files are more critical in Race07. You can change the following parameters.

Section of file - [Game Options]

AI Power Calibration="7"

It makes the game make adjustments for Power, Gearing, and Fuel. Add the Numbers together, and the game will adjust all three.

AI Max Load="32000.00000"

A number the game uses to calculate AI performance. How the game calculates this is not known. The lower the number, the better the AI is. 32000 to 38000 recommended. Lower values have not been tested?

AI to AI Collision Rate="40"

AI to AI collision Rates. High numbers make them not stay on the track "in a row", at setting "40" they become more daring in running and overtaking. The most obvious trait of a high Collision Rate setting is when the Ai seems to pull out to block you every time you try to overtake. If you don't like this then lower this number to something like 19. This setting is dependent on what type of racing you like, for sprint races of ten laps or so, a high collision rate of 40 would seem pretty good. But if you like endurance races of one hour or more this can get tiresome and a lower setting could be a better option.

AI Realism="0.20000"

Equivalent to the AI aggression slider in other Simbin games
There is no aggression slider in Race07. Further testing is needed.

Location Of Parameters - HDC file for the car the Ai is driving

AI`MinPassesPerTick`=7

The number of times per game-tic the suspension values are calculated. seven is the highest value, This setting affects game performance but any modern computer can handle a setting of seven. It is theorized that large numbers of Ai can experience chaotic behavior when all trying to pass each other in the first corner of a race due to the game engine skipping Ai path calculations when overloaded. Reducing this number may help. Further investigation is needed to confirm if this is actually the case.

AI`RotationThreshold`=0.20

Rotation threshold in radians per second to temporarily increment passes per tick to improve accuracy and stability of AI in corners. 1 radian per second is equivalent to 57.29578 degrees per second.

This makes no sense. I presume that during a corner, the Game engine calculates the curve for the Ai and that the number of calculations per game tick increases a lot, and this number limits that to prevent over CPU usage?

AI`EvenSuspension`=0.10

Averages out spring and damper rates to improve stability (0.0 - 1.0)
The use of this variable would increase the disparity between AI and player physics

AI`SpringRate`=0.9

Spring rate adjustment for AI physics is used to soften or stiffen the suspension for AI vehicles. Decrease this to soften spring rates to keep the AI stable. 1 is equivalent to the setup file or default setup.

AI`DamperSlow`=0.9

Contribution of average slow damper into simple AI damper. This simplifies dampers when used for AI.

AI_DamperFast=0.5

Contribution of average fast damper into simple AI damper.

AI_DownforceZArm=0.15

Hard-coded center-of-pressure offset from vehicle CG.

AI_DownforceBias=0.8

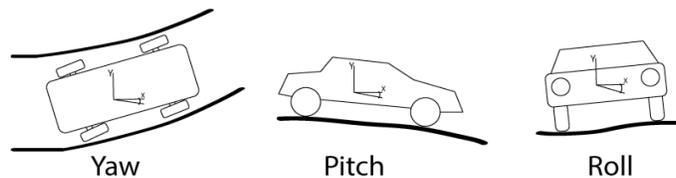
Bias between setup and hard-coded downforce value (Range: 0-1). 0 is most realistic, 1 is least realistic. A value of 0 will ensure the AI does not have more downforce than the player? This can be useful to improve AI stability though, especially if they have problems at high speeds.

FeelerFlags=0

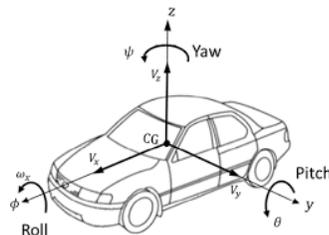
How collision feelers are generated (add): 1=box influence 2=reduce wall-jumping 4=allow adjustment hack 8=top directions.
Not yet confirmed if this setting is necessary, or what the default setting is.

AI_TorqueStab=(1.0,0.6,0.6)

The first number is Pitch, second number yaw third number roll.
If you are into planes that will make sense, for the rest of us see below.



Yaw, as in going around corners. Pitch as in up and down hills Roll as in Sway bar



This is the most overused setting in Race 07. Raising the numbers gives the Ai a sort of artificial stability in the given directions to help balance out forces on the Ai car. Commonly what happens is that someone makes a nice mod for Race 07 and then struggles to get the Ai settings to work, so raises these numbers to something like (1.2,1.2,1.2)

This is not necessarily wrong, but settings of (1.1, 0.6, 0.6) Have given a much more realistic result with some GT cars. And (0.5,0.5,0.5) for open-wheelers. Each individual car needs to be tested and adjusted until good for the best results. This takes a lot of work.