



**AiM Infotech**

Sim Racing  
iRacing setup

**Release 1.00**

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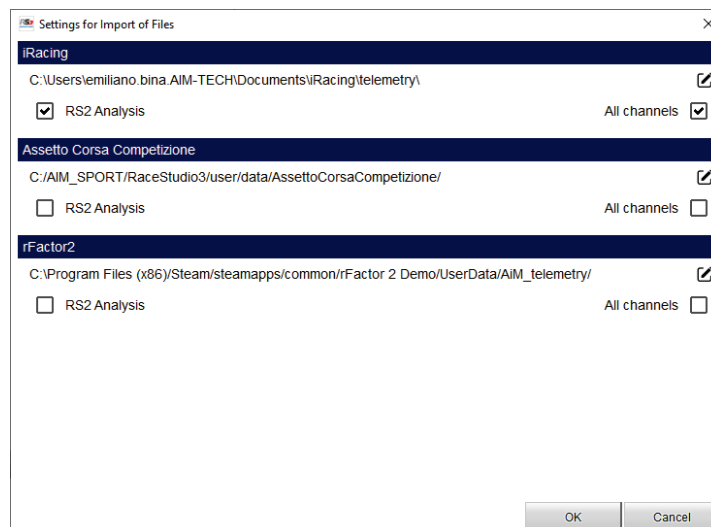
## 1 – iRacing

In this guide we'll see in a few steps how to generate telemetry data from iRacing with our software RaceStudio 3 and how to start analyzing them:

## 2 – Preliminary settings

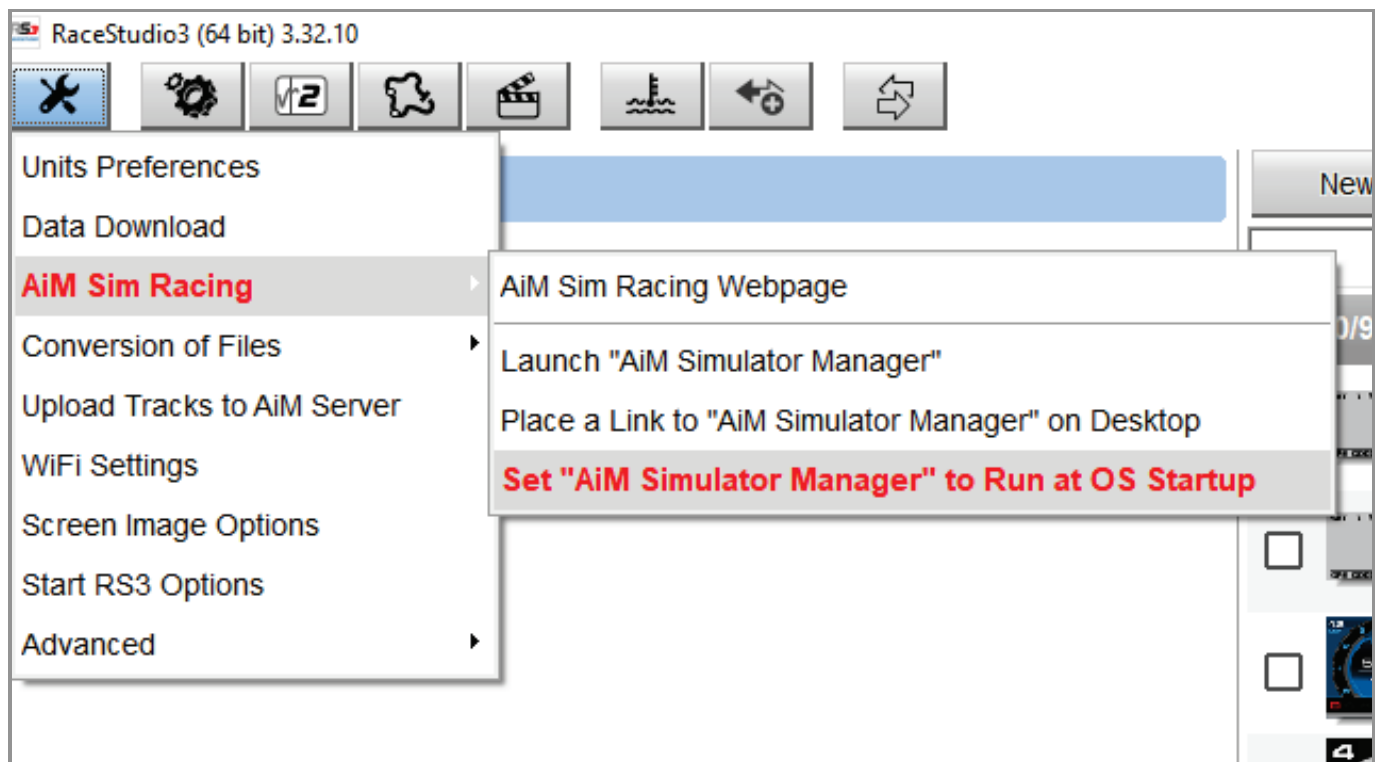
- Download RaceStudio 3 from the website [www.aim-sportline.com/en/sw-fw-download.htm](http://www.aim-sportline.com/en/sw-fw-download.htm) and install it. After the process is completed you'll also find that RaceStudio 2 has been installed in your PC, this is the software that you'll use to analyze your telemetry data.
- Now run RaceStudio 3 and in the *Preferences* menu go to *Conversion* and *Settings*. In this section there are the following fields and options:
  - The path to the folder where data to be analyzed are stored. This path can be customized using the icon at the end of the line
  - A checkbox for the Race Studio Analysis converter selection.
  - A checkbox you can choose in iRacing if you want all the available channels to be logged instead of the default list (the complete lists are in the appendix).

It's recommended to flag the RS2 checkboxes; doing so you will make RaceStudio 3 to monitor the folder in which the simulator saves the telemetry files. If you prefer to check it manually you can however use the batch conversion option available in the *Preferences – Conversion* menu.

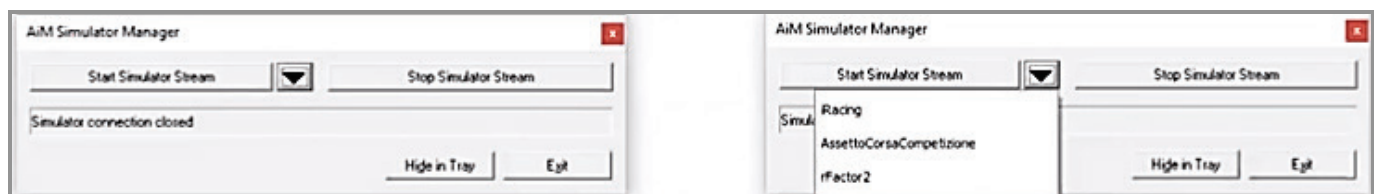


- Inside RaceStudio 3 you'll find a small application, the AiM Simulator Manager (ASM). ASM needs to be running while you are using the simulator and will allow you to record the telemetry data.

To select how this application should be launched, enter the RaceStudio 3 *Preferences* menu, then go in *AiM Sim Racing* section and make your choice if this should run automatically or manually (setting ASM to run at OS Startup is recommended).



The first time that you'll use the ASM, you'll simply have to choose what simulator you are going to use, clicking the start button and choosing it from the options.



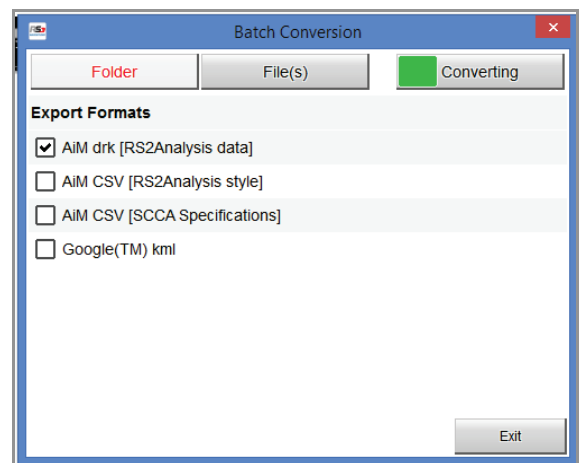
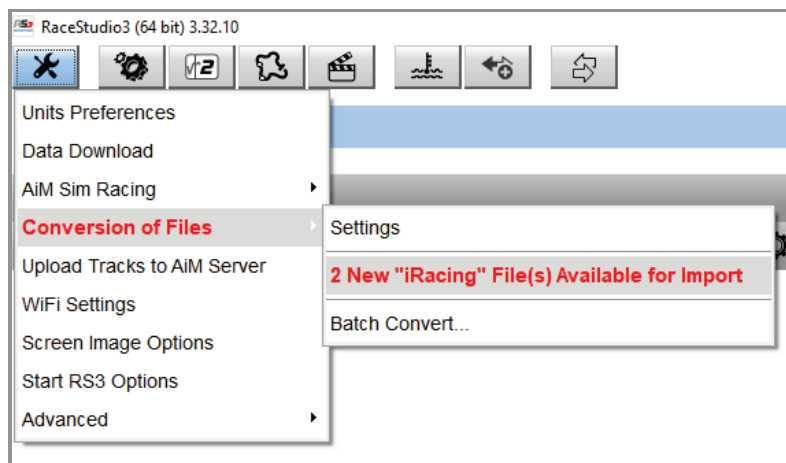
From the second time, ASM remembers your choice and based on the launch option chosen, it will start recording data during the race and will stop at the end of the session (so you don't have to press the stop button of the ASM).

Another way to generate Telemetry data in iRacing is, during a race, to press the alt-L (lowercase L, that stands for logging) buttons (or manage the dedicated buttons in the options menu). At the end of the session data logging will be stopped. ASM is the recommended option because everything is automatically managed.

## 3 – Drive and get data

Once everything is properly set, there are few steps left

- Run iRacing and enjoy!
- At the end of the session the data will be stored in the default folder: documents/iRacing/telemetry, in ibt format.
- Now you have to import the data and convert them in DRK format. Go to the *Preferences* menu, then *Conversion of Files* and select the files that you need. In few seconds RaceStudio2 Analysis will automatically open the last session files and you'll be able to start analyzing the data and checking every single detail of your performance!





## 4 – Appendix

**Default** channels available for iRacing are (some channels like the GPS ones are generated by RaceStudio, not by iRacing):

| CHANNEL NAME       | FUNCTION                 | CHANNEL NAME        | FUNCTION                        |
|--------------------|--------------------------|---------------------|---------------------------------|
| AirTemp            | Air Temperature          | OilPress            | Oil Pressure                    |
| FuelLevel          | Fuel Level               | OilTemp             | Oil Temperature                 |
| FuelLevelPct       | Fuel Level Percentage    | PitchRate           | Pitch rate                      |
| GPS_Altitude       | GPS altitude             | RFspeed             | Front right wheel speed         |
| GPS_Gyro           | GPS gyroscope            | RPM                 | Engine RPM                      |
| GPS_heading        | GPS heading              | RRspeed             | Rear right wheel speed          |
| GPS_LatAcc         | GPS lateral acceleration | RollRate            | Roll rate                       |
| GPS_LonAcc         | GPS longitudinal accel.  | Speed               | Speed                           |
| GPS_Nsat           | GPS satellites number    | VelocityX           | Vehicle speed (local; inline)   |
| GPS_PosAccuracy    | GPS position accuracy    | VelocityY           | Vehicle speed (local; lateral)  |
| GPS_Slope          | GPS slope                | VelocityZ           | Vehicle speed (local; vertical) |
| GPS_SpdAccuracy    | GPS speed accuracy       | VertAccel           | Vertical acceleration           |
| GPS_Speed          | GPS speed                | Voltage             | Voltage                         |
| IsOnTrackCar       | Car on track             | WaterLevel          | Water Level                     |
| LFspeed            | Front left wheel speed   | WaterTemp           | Water Temperature               |
| LRspeed            | Rear left wheel speed    | YawNorth            |                                 |
| Lap                | Lap number               | YawRate             | Yaw rate                        |
| LapDist            | Lap Distance             | Brake               | Brake                           |
| LapDistPct         | Lap Distance Percentage  | Clutch              | Clutch                          |
| LatAccel           | Lateral acceleration     | CpuUsageBG          |                                 |
| LongAccel          | Longitudinal accel.      | DriverMarker        | Driver marker                   |
| ManifoldPress      | Manifold air pressure    | Gear                | Active gear                     |
| OilLevel           | Oil Level                | IsOnTrack           |                                 |
| OnPitRoad          |                          | PlayerCarClassPosit | Car position                    |
| PlayerCarPosition  | Player Car Position      | SessionNum          | Session Number                  |
| SteeringWheelAngle | Steering position        | Throttle            | Throttle position               |



**Advanced** channels available for iRacing are (if you flag the “all channel” option you have the default+advance channel):

| CHANNEL NAME        | FUNCTION              | CHANNEL NAME        | FUNCTION                      |
|---------------------|-----------------------|---------------------|-------------------------------|
| AirDensity          | Air Density           | LFrideHeight        |                               |
| AirPressure         | Air Pressure          | LFshockDefl         |                               |
| FastRepairAvaible   | Fast repair available | LFshockVel          |                               |
| FastRepairUsed      | Fast repair used      | LRcoldPressure      | Rear left wheel cold pressure |
| FogLevel            | Fog Level             | LRpressure          | Left Rear wheel Pressure      |
| PitOptrepairLeft    |                       | LRrideHeight        | Rear left wheel ride height   |
| PitRepairLeft       |                       | LRshockDefl         |                               |
| PitsOpen            | Open pit              | LRshockVel          |                               |
| PitstopActive       | Active pit stop       | LRtempCL            |                               |
| RelativeHumidity    | Relative humidity     | LRtempCM            |                               |
| Skies               | Skies                 | LRtempCR            |                               |
| WeatherType         | Weather Type          | LRtempL             |                               |
| WindDir             | Wind Direction        | LRtempM             |                               |
| WindVel             | Wind Velocity         | LRtempR             |                               |
| PitSvFlags          |                       | LRwearL             |                               |
| PitSvFuel           |                       | LRwearM             |                               |
| PitSvLFP            |                       | LRwearR             |                               |
| PitSvLRP            |                       | dcBrakeBias         |                               |
| PitSvRFP            |                       | dcDashPage          |                               |
| PitSvRRP            |                       | dcHeadlightFlash    |                               |
| SteeringWheelTorque | Steering Wheel Torque | dcLaunchRpm         |                               |
| TireLF_RumblePitch  |                       | dcPitSpeedLimiterTo |                               |
| TireLR_RumblePitch  |                       | dcStarter           |                               |
| TireRF_RumblePitch  |                       | dcToggleWindshieldW |                               |
| TireRR_RumblePitch  |                       | dcTriggerWindshield |                               |
| FuelPress           | Fuel Pressure         | dpFastRepair        |                               |
| FuelUsePerHour      | Fuel Used Per Hour    | dpFuelAddKg         |                               |
| BrakeRaw            | Brake pressure        | dpFuelFill          |                               |



|                     |                                  |                     |                                 |
|---------------------|----------------------------------|---------------------|---------------------------------|
| EngineWarnings      | Engine Warnings                  | dpLFTireChange      |                                 |
| HandbrakeRaw        | Handbrake Raw                    | dpLFTireColdPress   |                                 |
| ShiftGrindRPM       |                                  | dpLRTireChange      |                                 |
| ShiftIndicatorPct   | Shift Indicator Percentage       | dpLRTireColdPress   |                                 |
| ShiftPowerPct       | Shift Power Percentage           | dpRFTireChange      |                                 |
| SteeringWheelAngleM | Steering wheel maximum angle     | dpRFTireColdPress   |                                 |
| SteeringWheelPctDam | Steering wheel damper percentage | dpRRTireChange      |                                 |
| SteeringWheelPctTor | Steering wheel torque percentage | dpRRTireColdPress   |                                 |
| ThrottleRaw         | Throttle Raw                     | dpWindshieldTearoff |                                 |
| LFcoldPressure      | Front left wheel cold pressure   | RFbrakeLinePress    | Front right brake line pressure |
| LFpressure          | Left Front wheel press           | LFbrakeLinePress    | Front left brake line pressure  |
| LFtempCL            |                                  | RFcoldPressure      | Front right wheel cold pressure |
| LFtempCM            |                                  | RFpressure          | Right Front wheel press         |
| LFtempCR            |                                  | RFtempCL            |                                 |
| LFtempR             |                                  | RFtempCM            |                                 |
| LFwearL             |                                  | RFtempCR            |                                 |
| LFwearM             |                                  | RFtempL             |                                 |
| LFwearR             |                                  | RFtempM             |                                 |
| RRbrakeLinePress    |                                  | RFTempR             |                                 |
| CFSRrideHeight      |                                  | RFwearL             |                                 |
| RFrideHeight        |                                  | RFwearM             |                                 |
| RFshockDefl         |                                  | RFwearR             |                                 |
| RFshockVel          |                                  | LRbrakeLinePress    |                                 |
| RRrideHeight        |                                  | RRcoldPressure      | Rear right cold pressure        |
| RRshockDefl         |                                  | RRpressure          | Rear right wheel pressure       |
| RRshockVel          |                                  | RRtempCL            |                                 |
| LapCompleted        | Cmpleted lap                     | RRtempCM            |                                 |
| LapBestLap          | Best lap                         | RRtempCR            |                                 |
| LapBestLapTime      | Best lap time                    | RRtempL             |                                 |



|                     |                          |                     |                            |
|---------------------|--------------------------|---------------------|----------------------------|
| LapBestNLapLap      | Best lap number          | RRtempM             |                            |
| LapCurrentLapTime   | Current lap time         | RRtempR             |                            |
| LapDeltaToBestLap   | Difference with best lap | RRwearL             |                            |
| LapDeltaToBestLap_D |                          | RRwearM             |                            |
| LapDeltaToBestLap_O |                          | RRwearR             |                            |
| LapDeltaToOptimalLa |                          | RRwearR             |                            |
| LapDeltaToSessionBe |                          | Yaw                 | Yaw rate                   |
| LapDeltaToSessionLa |                          | Alt                 | Altitude                   |
| LapDeltaToSessionOp |                          | EnterExitReset      |                            |
| LapLasNLapSeq       |                          | Lat                 | Lateral accelerometer      |
| LapLastLapTime      | Last lap time            | Lon                 | Longitudinal accelerometer |
| LapLastNLapTime     |                          | Pitch               | Pitch rate                 |
| dcABS               |                          | Roll                | Roll rate                  |
| TrackTemp           | Track Temperature        | TrackTempCrew       |                            |
| ManualBoost         | Manual Boost             | ManualNoBoost       | No Manual Boost            |
| PushToPass          | Push to pass             | FrameRate           | Frame Rate                 |
| PaceMode            | Pace Mode                | PlayerCarDriverInci |                            |
| PlayerCarIdx        |                          | PlayerCarInPitStall |                            |
| PlayerCarMyIncident |                          | PlayerCarPitSvStatu |                            |
| PlayerCarPowerAdjus | Car power adjustment     | PlayerCarTeamIncede |                            |
| PlayerCarTowTime    |                          | PlayerCarWeightPena |                            |
| PlayerTrackSurface  |                          | PlayerTrackSurfaceM |                            |
| SessionFlags        | Session flags            | SessionTimeRemain   | Session remaining time     |
| SessionLapRemain    | Session remaining laps   | SessionUniqueID     |                            |
| SessionLapsRemainEx |                          | SessionTick         |                            |
| SessionState        | Session state            | SessionTime         | Session Time               |
| SessionTimeOfDay    | Session day time         |                     |                            |

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