

AiM Infotech

Sim Racing iRacing setup

Release 1.00



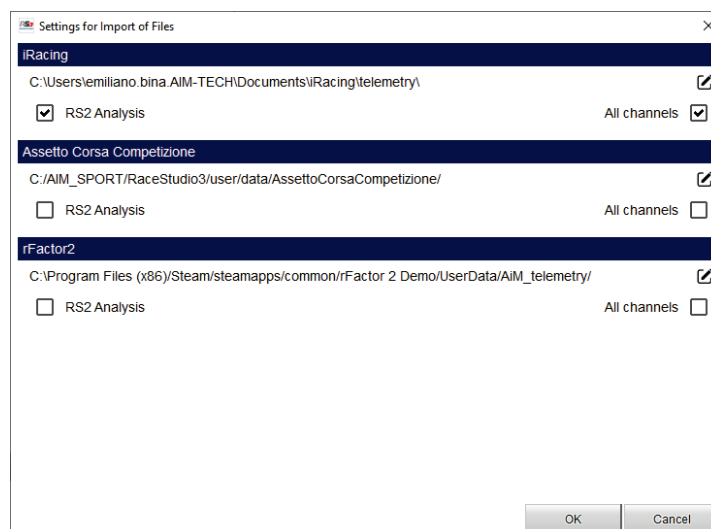
1 – iRacing

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

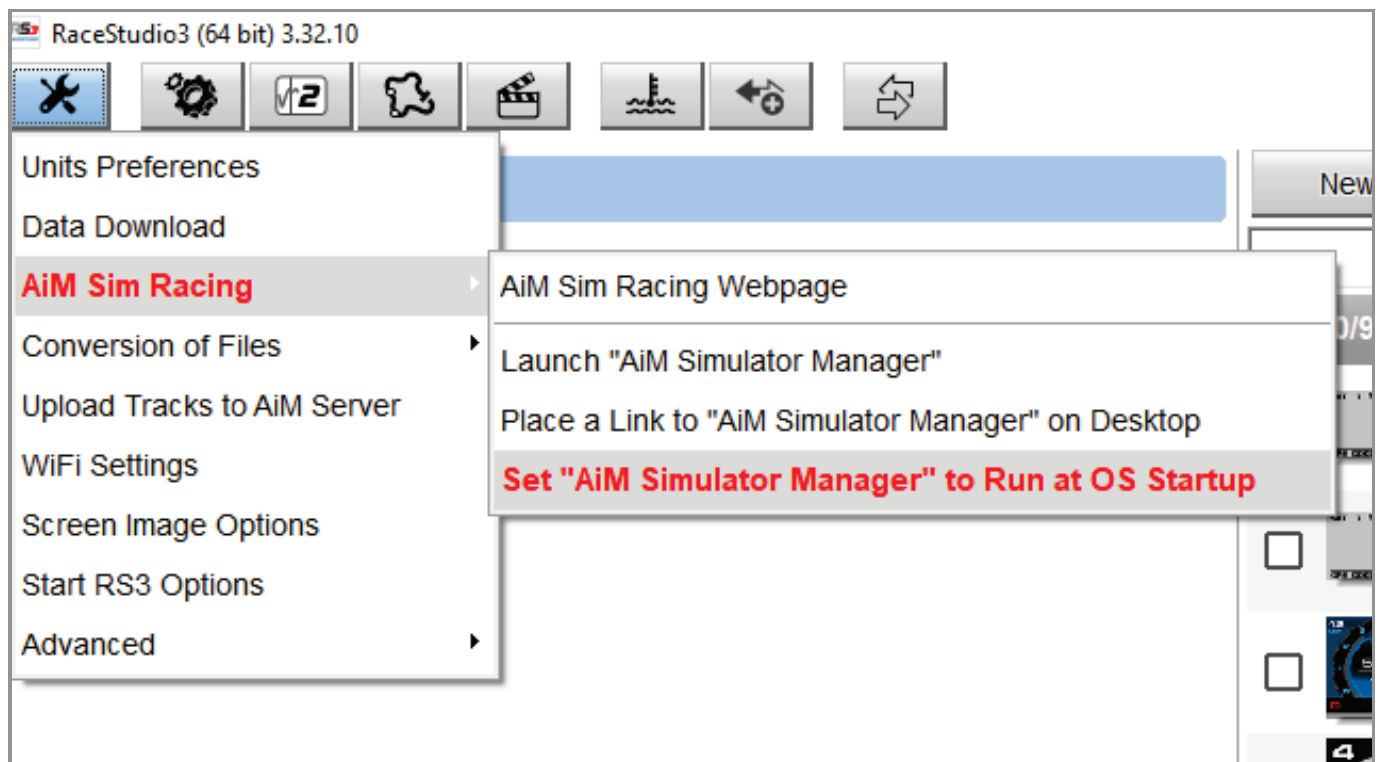
- Download RaceStudio 3 from the website www.aim-sportline.com/en/sw-fw-download.htm and install it. After the process is completed you'll also find that RaceStudio 2 has been installed in your PC, this is the software that you'll use to analyze your telemetry data.
- Now run RaceStudio 3 and in the *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.



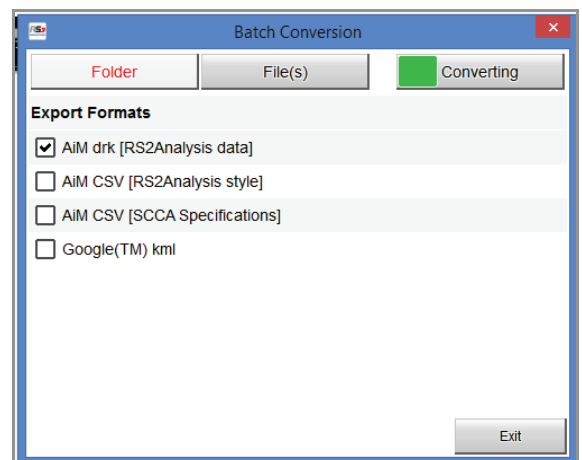
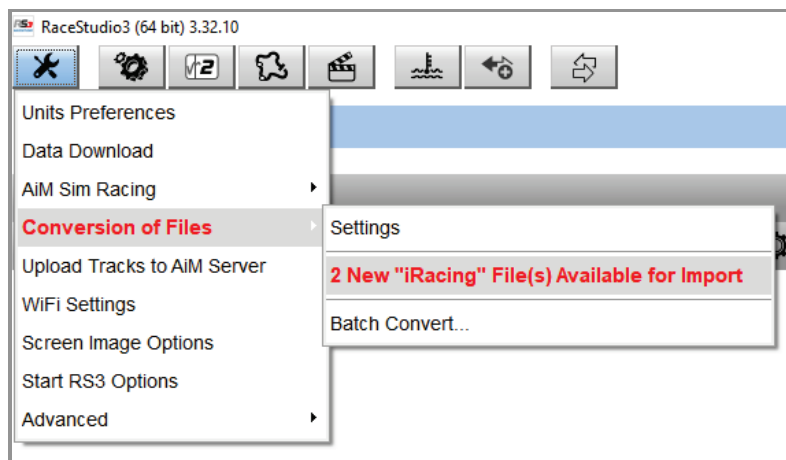
From the second time, ASM remembers your choice and based on the launch option chosen, it will start recording data during the race and will stop at the end of the session (so you don't have to press the stop button of the ASM).

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	Cpcompleted 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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