

Jan, 12th 2018

# Race Studio 3 Release history

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Version **3.16.28**  Date Jan, 12th 2018

### Change/additions

#### Configuration

- Improved support for TQM Files
- It is now possible to set ECU channel display precision
- Fixed bug for which temperatures (only in F) showed a 25 F offset in CAN output
- Fixed bug for which alarms import could generate inconsistencies in configuration (i.e. importing 5 LED alarms cfg on a 4 LED device)
- Fixed minor bug for which, in MXL2 display cfg, a change in rpm/speed channels could not generate a refresh in display page
- Fixed MXS Strada display pages that used to show a min rpm value of 1000 instead of 0

#### **Firmware included**

- MX Series and EVO Series ver. 1.26.25
- Next ECU stream released:

Manufacturer	Model	Compatib.	Description
HONDA	CAN CBR 2017	All	



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Version	Date	Change/additions
3.16.26	Dec, 20th 2017	Configuration
		Improved channel association in case of ECU change inside a configuration:
		Whenever possible the enabled/disabled status of a channel is kept as is
		Bitfield configuration is kept as is
		Introduced the possibility to keep previously used channels' names
		Up to 3 decimal figures enabled for 'gal' and 'gal/s'
		Fixed minor bug in alarms importing
		Fixed minor drawing bug when low resolution displays were used
		Fixed missing cases in which configuration could not be saved when closing software forgetting to click the proper save button

Upgrade/Bug Fix:

Manufacturer	Model	Compatib.	Description
HALTECH	CAN V2	All	Update to v2.16

3.16.22 Nov, 17th 2017

#### Configuration

- Improvement: linear corrector math channel lets you now arbitrarily choose function and units
- Improvement: new masks for MXG-MXS (and Strada) featuring requested scales and avoiding red zone
- Improvement: CAN Builder: protection key is automatically added opening an imported protocol
- Introduced new function 'speed limiter' (selectable also in CAN protocol)
- Changed name for 'velocity' function into 'speed (velocity)'
- Fixed bug in digital speed channels: there were (limited) cases in which wheel circumference value was erroneously converted when changing units
- Fixed bug in dashes overlay: measures were shown in default units if user choosed not to show units
- Fixed minor bug in CAN output static values management and number of bytes (these values could be wrong after several changes in their values)

#### ECU stream released:

Manufacturer	Model	Compatib.	Description
SYVECS	LR_F88_CAN_500k	All	

Upgrade/Bug Fix:

Manufacturer	Model	Compatib.	Description
ECU MASTER	EMU	All	The ECU driver has been renamed from EMU "CAN_500k" to ECU MASTER "EMU". Fixed some channel conversion
DUCATI	1299	All	Added Front brake pressure and Switch Map channels
AUDI	AUDI_R8_LMS_GT3_038	All	Fixed Front Brake Press channel conversion



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3.16.20	

Date Oct, 24th 2017

### Change/additions

### Configuration

- New Pages added for MXG/MXS
- Fuel level management in odometers (now 'counters') page (requires new firmware, provided with sw installer)
- "Off Road" track type has been added
- The RS3 installer can be lauched in silent mode, for possible batch installations
- Bug fix for a couple of crashes that could occur inlive view with SmartyCamHD, in live measures, and while closing software
- Minor improvements

### ECU stream released:

Manufacturer	Model	Compatib.	Description
BOSCH	DALLARA_F3_08	All	
HOLLEY	EFI	All	
ASTON MARTIN	CAN_HS	All	
ASTON MARTIN	CAN_LS	All	
SIMTEK	01X19	All	
EFI_EUROPE	EURO_12_F3	All	
MECTRONIK	MKE7_R6_WSS	All	
HONDA	CAN_CBR250RR	All	
RENAULT	CLIO_R4_CUP	All	
SKODA	OCTAVIA_CUP_MS6	All	
SCS	DELTA_GDI4	All	
SCS	DIESEL	All	
SCS	PETROL	All	
SYVECS	LR_F88_CAN	All	
KTM	X-BOW	All	
KTM	X-BOW_GT4	All	
ARTIC CAT	WILD CAT	All	
BRP	SkiDoo 600RS G4	All	
BRP	CanAm SSV	All	
YAMAHA	YXZ 2016	All	ECU driver for up to 2016 models
YAMAHA	YXZ 2017	All	

### Upgrade/Bug Fix:

Manufacturer	Model	Compatib.	Description
BMW	M235i	All	Fixed Fuel Raw channel
FIAT_ABARTH	CAN_STANDARD	All	Added Vehicle speed channel (FA_VEH_SPEED_2) for FIAT PUNTO 2008
HONDA	CIVIC_TYPE_R_FD2	All	Fixed temperature offset



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### Change/additions

HYUNDAI	CAN	All	Added channels
PEUGEOT	308_TCR	All	Added gear channel
F88	F88_CAN	All	Added Ethanol content channel
KMS	MD35	All	Fixed Ignition BDTC channel's unit of measurement
POLARIS	RZR	All	Fixed RPM channel and added new channels
BRP	SkiDoo 600RS XS	All	Changed name from SKI_DOO_MXZ_600RS to SkiDoo 600RS XS

3.16.00

#### Jun, 20th 2017 Configuration

The download from the Memory Module is now managed

- Improved the user information window in case of errors that might occur while saving a configuration
- The speed channels configuration window, when channels are used as angular speed, feature now the possibility of "deg/s" and "rad/s"
- Fixed bug that could generate a mistake in the EVOx configuration while switching from a dash to another one

#### ECU stream released:

Manufacturer	Model	Compatib.	Description
MAZDA	01L30MX5_ND_GEMS	All	Starting with 01L30 ECU firmware
MECTRONIK	MKE7_RACECAR_STD	All	

#### Upgrade/Bug Fix:

Manufacturer	Model	Compatib.	Description
MAZDA	MX5_ND_GEMS	All	Before 01L30 ECU firmware

#### 3.15.08

Jun, 16th 2017

#### Configuration

Fixed bug for which the CAN output feature couldn't be storing correct infor about channels after closing the software



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\/	Data					
Version	Date	Change/additions				
3.15.07	Jun, 15th 2017	Fixed issues on de	vices not communicating, due to	o expired certi	ficates	
3.15.05	Jun, 9th 2017	On June 12th all o an expire date; he installing or comn	nce, using previous installers, Wir nunicating. ains a certificate valid for the nex	ndows may pro	nger valid as all certificates have ompt you a warning message while	
		Manufacturer	Model	Compatib.	Description	
		LOTUS	EXIGE_V6_CUP_R	All		
3.15.04	Jun, 1st 2017	<ul> <li>Fixed for all softw</li> <li>Fixed very long m</li> <li>Fixed cases in wh</li> <li>Fixed bad channe</li> <li>Fixed possible bad</li> <li>Fixed crash while</li> <li>Fixed bad manag</li> </ul>	are windows the management o ame erroneously given to a MXC	f low resolutic 5-MXS page some warning ive and reoper s for slave das onfiguration	icons could erroneously appear n hes	
		Analisys				
		Fix in bad sorting algorithm applied to DB time and date columns only in english language				
		<ul> <li>Fixed bug for whi plotted</li> </ul>	ch, in time-distance plot, a chan	nel could resu	ult in being with no Y scale and no trace	
		ECU stream relea	sed:			
		Manufacturer	Model	Compatib.	Description	
		FERRARI	488_GT3	All		
		CAN2 stream rele	ased:			
		Manufacturer	Model	Compatib.	Description	
		TEVES	MK60_E5_1M	All		



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Version	Date	Change/additions
3.15.00	May, 18th 2017	Configuration
		New functionality to automatically update features that use ECU channels when you change or update the ECU protocol in configuration
		Upgraded warning management to better identify what features in configuration need to be checked
		Configuration Import: fixed bug when the imported configuration already exists on PC
		Fixed bug on Luminosity channel when used by CAN Output feature
		Analisys
		Introduced the possibility to show the average values for the channels shown in distance plot and in delta. The possibility has to be enabled in time/distance view settings
		Introduced the possibility to show the date and time of the start of every lap in lap manager view
		Introduced the possibility, in the channels report, to compute the average value of a channel avoiding to include zero values in the computation of average values
3.14.01	Apr, 19th 2017	New functionality:
		<ul> <li>Logo management for GS-Dash and Formula Steering Wheel 3 for EVO5 and EVO4S (firmware update is needed)</li> </ul>
		The RS3 software warns users in case they add more alarms or math channels than the firmware can manage
		Fixed bug in alarms import/export
		Fixed bug in AiM digital speed channels when 'Ang Velocity' is selected (i.e. RPM setting) for EVO5 and EVO4S. Firmware update is needed
		Minor bug fixed
3.14.00	Mar, 24th 2017	Added management for GS-Dash and Formula Steering Wheel 3 for EVO5 and EVO4S
		Custom sensors now allow the management of 12V channels (up to 13V)
		Added new units for the creations of ECU protocols: Fuel Consumption and Fuel Efficiency
		<ul> <li>Odometers now feature the possibility to be enabled/disabled and show a number of decimal figures that matches RS3 settings</li> </ul>
		CAN Output channels now show the unit of measure of chosen channels
		<ul> <li>Autocalibration of accelerometers now manages the following values: lateral acceleration 0.0, inline acceleration 0.0, vertical aceleration -1.0</li> </ul>
		Accelerometers settings now match for all systems the SAE xyz vehicle axes. Existing configurations must be opened and accelerometers settings verified to see the improvements
		ECU protocols: some old protocols have been "revamped" to new ECU management
		New tracks have been added
		Fixed a bug for which, while editing a track or creating a new one upon recorded data, the beacon could be misplaced



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#### Change/additions

- Fixed a bug for which the Wi-Fi password request could erroneously be shown while connecting to a device
- Fixed a bug for which, while modifying an odometer name, the correct name could be reset to previous name (hence without sending it to the device)
- Fixed a bug for which, in CAN Output feature and in Display settings, while choosing the channel to be used in a field, the 'not set' value couldn't be used any more
- Fixed a bug for which, during download, some settings for stepped values could be disattended, hence generating interpolated values
- ECU stream released:

Manufacturer	Model	Compatib.	Description
FORD	FIESTA_ST150	All	
MERCEDES	AMG_GT_GT3_LIM	All	
HYUNDAI	CAN	All	
EFI_EUROPE	Euro_4_v326	All	
AUDI	R8_LMS_GT3_SMC	All	
PERFORMANCE EL	ECU_PE3_1Mbit	All	
KTM	1190	All	

CAN2 stream released:

Manufacturer	Model	Compatib.	Description
TEVES	MK60_E5	All	
TEVES	MK60_ABS_MS_1Mbit	All	

Upgrade/Bug Fix:

Manufacturer	Model	Compatib.	Description
LOTUS	Cluster 11 _ Exige Cup R	All	Fixed 4 wheel speed channels
KMS	MD35	All	Fixed gear channel
EFI	Euro_1	All	Fixed NTK channels
LINK	CAN_500k_BUS_BASE_LCC	All	Fixed oil and fuel pressure channels
LINK	CAN_BUS_BASE_LCC	All	Fixed oil and fuel pressure channels
GET	A4	All	Add new channels
HONDATA	KPRO4_CAN	All	Fixed fuel temperature channel
BMW	M235i	All	Changed gear management
VOLKSWAGEN	VWGroup	All	Fixed fuel level channel
SUBARU	SSM 1999/2007	All	Fixed communication problem between logger and ECU
MAZDA	MX5_ND_GEMS	All	Upgrade ECU driver



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### Race Studio 3 Release history Page 8 Version Date Change/additions 3.13.00 Jan, 18th 2017 Configuration New features added: ECU driver Builder GSP\_POS\_Accuracy channel is available for display and CAN output (new firmware 1.22.99 for MX family and EVO family is required) New RPM scales for 'Rally Page' Tire temperature sensor Minor bug fixed 3.12.15 Dec, 6th 2016 Download Fixed bug that could generate data shift of some channels only in case of multiple download Configuration Bug fix: GPS Speed could not be selected from channels expander dropout 3.12.14 Dec, 2nd 2016 Configuration Fixed bug for which in some cases the slaves configuration, upon transmission, could not be forwarded to slave units Fixed crash in settings window that could happen for all devices, improved also settings filter to avoid useless parameters repetitions Download Fixed management of test types during download, now the software correctly keeps last user choice Minor fixes in download window tooltips and in error messages management (messages could be erroneously shown more than one time) Fixed bug for which the csv exports in RS3 download could offer a low precision in timing Improved csv exports to manage also GPS position accuracy Fixed bug for which there could be few bad samples at the end of the drk xrk/drk/csv files for high frequency sampled channels Tracks Minor fixes in nations management (i.e. Aruba) Minor fix in track creation window to allow a name change refering only to letters case (i.e. monza -> Monza) Fixed bug for which tracks filter could not be saved and tracks list could not be correctly updated after a change in nations settings



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Version	Date	Change/additions
3.12.10	Nov, 22nd 2016	Configuration
		Improvement: in the download window the error message that is prompted in case of problems has been made more meaningful for determining what happened
		Fixed bug in download that could lead to crashes when exporting to MatLab format
		Fixed bug for which, during download, in case of big ".xrk" files, the convertion to ".drk" could lead to bad values in logged channels
		Some minor fixes (tooltips and drawing imperfections) in the download window in case of mov files download from SD or SmartyCam
		Analisys
		Fixed bug for which the satellites number in analysis saturated to a maximum number of 20, while GPS08 receivers can go over that number due to the use of more constellations (GPS-Glonass) than the GPS05 (GPS only)
3.12.06	Nov, 11th 2016	Download
		Fixed bug for which RS3 could show a warning message on max 100 MB download in wrong cases and other improvements
		Tracks
		Faster tracks download from web
		Configuration
		Fixed bug in alarm settings: it wasn't possible to manage colored measures
3.12.00	Oct, 25th 2016	Download
		<ul> <li>Improved data download speed: USB comm speed, data conversion from xrk (logged by devices) to drk (for RS2Analysis)</li> </ul>
		Added possibility to merge several xrk files into one single drk file
		In download window now it's possible to skip automatic selection of sessions made of one single lap, like it was in RS2
		Fixed bugs that could lead to crashes in case some different output format (eg. MatLab or NI) was selected in download phase
		Automatic naming for downloaded xrk files now let users avoid automatic insertion of original file name and logger ID into file name
		Tracks
		<ul> <li>Fixed bug for which it was impossible to save a new track when it was open shaped and very long (longer than 16 km)</li> </ul>



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#### Change/additions

- Added possibility to modify an AiM track into a user track in case anyone would want to modify the track shape
- During track creation/modification now the RS3 better checks if the beacon position is compatible with the track shape loaded, and coordinates edit boxed better allow for decimal figures
- During track creation, upon request to users to share data with AiM, now the shape of all laps (instead of the shape of one single lap) is shared. This for AiM labs to have more data to release a better map

#### Configuration

- Fixed bug for which it was possible for users to enter channel names using non ASCII fonts
- Minor bug fixes in configuration management
- Added alert window to inform the user that replacement of original instrumentation cluster may disable some of the bike functions
- In channel settings window it is now possible to set also the short name

#### Analysis

Bugfix in RS2Analysis to avoid the measure units change in potentiometer channels, that sporadically occurred to some customers

#### General

- Fixed some bugs for which the software could crash while closing and prevent a new instance from being run
- While closing the software the main window is kept open untill all internal memory cleanup is finished
- ECU stream released:

Manufacturer	Model	Compatib.	Description
AIM	CAN_500kbits	All	
AIM	CAN_1Mbit	All	
FORD	MUSTANG_2015	All	
PORSCHE	CAYMAN_981_GT4_ClubSport	All	
PORSCHE	991_GT3_R_SMC	All	
APRILIA	RSV4	All	
APRILIA	RSV4_APRC	All	
BMW	BIKE_S1000RR	All	
BMW	BIKE_S1000RR_2015	All	
DUCATI	1098_S	All	
DUCATI	1299	All	
DUCATI	ECU_NEMESIS_2	All	
DUCATI	HYPERMOTARD	All	
DUCATI	MULTISTRADA_1200	All	
DUCATI	Marelli_IAW_5.9	All	



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### Change/additions

DUCATI	PANIGALE	All	
KAWASAKI	KIT_RACING	All	
KAWASAKI	ZX10R_2016	All	
MV_AGUSTA	F3	All	
MV_AGUSTA	F4	All	
TRIUMPH	BIKE_K_LINE	All	
TRIUMPH	DAYTONA_675	All	
YAMAHA	CAN_2015	All	

### CAN2 stream released:

Manufacturer	Model	Compatib.	Description
BRIGHTWATER	TPMS	All	
HEWLAND	GCU	All	
TIRE_WATCH	TPMS	All	

### Upgrade/Bug Fix:

Manufacturer	Model	Compatib.	Description
HONDATA	K_PRO		Fixed channels management
OPEL	ASTRA_TCR_2016		Changed ECU driver name
TEXYS	IRN4C		Corrected last CAN2 channel

3.11.08	Sep, 15th 2016	Fixed bug about importing configuration: bitfield channels are now correctly imported
3.11.03	Jul, 22nd 2016	<ul> <li>Wi-Fi: - Communication is now more reliable</li> <li>- Updated icon and menu</li> <li>Minor bugfix</li> </ul>
3.11.01	Jul, 1st 2016	<ul> <li>Supporting EVO4S</li> <li>Added automatic track updates from web</li> </ul>
		<ul> <li>Added tooltip that explains how to use quick filter search editbox</li> <li>Added new tracks</li> <li>Fixed minor bugs: a name previously used for a configuration erased from disk, can now be reused</li> <li>Fixed minor bugs: after deleting expansions in a configuration, is now asked to save before close</li> <li>Fixed minor bugs: clicking 'Save As' configuration, also CAN output data is now saved</li> </ul>



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Version	Date	Change/additi	ons			
3.10.12	Jun, 17th 2016	Minor improve	ment to	better message the user	that tries to la	unch two instances of Race Studio 3
		In case a device is connected both via USB and via WiFi the connection name is reflected also in tab name				
		<ul> <li>Bugfixes in cust deprecated ser</li> </ul>		sor import to correctly m	anage the upc	late button and (eventually)
		Bugfix in mana	gement	of WiFi password		
		Bugfix in showi	n date/ti	ime of configuration		
		Improvement, i	in the co	onfigurations DB, of the "o	loned on" "c	oned on" "received on" notes
		Bugfix in sendi	<ul> <li>Improvement, in the configurations DB, of the "cloned on" "cloned on" "received on" notes</li> <li>Bugfix in sending tracks to devices (via USB an error in transmission was possible, resulting in no tracks sent to devices)</li> </ul>			
3.10.10	Jun, 9th 2016	<ul> <li>New track man can receive new</li> </ul>			with software	recognizing if a single device
		<ul> <li>User interface fixes for windows in which it was impossible to scroll (hence possibly hidi of the window)</li> </ul>				croll (hence possibly hiding parts
		Fixes to avoid wrong settings, like inserting an ampty channel name				name
		Improvements in potentiometers calibration interface				
		Improvements	Improvements and fixes in importing custom sensors from a configuration			
		Minor fixes in w	veb upd	ates feature		
		Fixes to avoid b	oad conf	igurations while disabling	g/clearing/sub	stituting alarms
		New tracks and	ECU pr	otocols		
		WiFi communic with Parallels/V			ws and virtual	ized Windows (i.e. MacOS
		ECU stream rele	eased:			
		Manufacturer	Model		Compatib.	Description
		MOTEC	M1_500	)k	All	
		MOTEC	M130_1	TRIUMPH675R_BSS	All	
		POLARIS	RZR		All	
		BOSCH	MS 5.8	F3 2014	All	
		MECTRONIK	MV_EC	U_KIT_476_1Mbit	All	
		BMW	MINI_C	HALLANGE_2016	All	
		CAN2 stream released:				
		Manufacturer		Model	Compatib.	Description
		WIRELESS_MOTO	ORSPORT	BIOTELEMETRY_CAN0	All	
		■ Upgrade/Bug F	ix:			
		Manufacturer	Model		Compatib.	Description
		manufacturer	model		compario.	

All

Corrected Steering Wheel angle channel

350Z

NISSAN



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Version 3.10.00	Date May, 9th 2016	Change/additions = New device added: MXS Strada = New tracks added			
3.09.01	Apr, 28th 2016	<ul> <li>Race Studio Analysis</li> <li>Minor fixes in Data Export functionality</li> <li>Race Studio 3</li> <li>Fix: some pixelation problems that could happen to icons on some PCs (depending on graphic hardware)</li> <li>Fix: bug in Configuration Parameters: GPS Beacon 'Track Width' value could not be updated</li> <li>Fix: CanOutput: Expansions Channels were lost when using Import/Clone</li> <li>Fix while downloading data in order to prevent cases in which lap type was bad in drk files, generating a bad best lap time in analysis</li> <li>New tracks added</li> </ul>			
3.09.00	Apr, 20th 2016	<ul> <li>New tracks added</li> <li>RS3 Startup has been made quicker, also through the introduction of a new start screen picture, that doesn't bring users to configurations database. The start screen picture is user customizable</li> <li>CAN Output feature has been introduced into configuration</li> <li>Tracks (and configuration) database "Quick filter" behaviour has been improved</li> <li>Measure Units in downloaded files now are coherent with units used in live measures functionality</li> <li>After opening a configuration, if it features some custom sensors that are missing in RS3 custom sensors list, RS3 enables the users to add them to the list</li> <li>New tracks added</li> <li>PLEASE PAY ATTENTION that minimum firmware needed to use the CAN Output feature is:</li> <li>1.18.21 for MXG-MXL2-MXS</li> <li>1.20.64 for EVO5</li> <li>Such firmware is included into this RaceStudio3 release, just to be sure that users get it also without specifically downloading it.</li> <li>ECU stream released:</li> <li>Manufacture</li> <li>Model</li> <li>Compatib.</li> <li>Description</li> </ul>			



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### Change/additions

PEUGEOT	308_TCR	All	
HONDA	Civic_TCR_H56	All	
MARELLI	MYGALE_F4	All	
LIFE	MYGALE_F4	All	
MAZDA	MX5 ND GEMS	All	
BOSCH	FunCup_40VWHX3A_2	All	
HONDATA	KPRO4_CAN	All	
EFI_EUROPE	EURO_2_V061	All	
WALBRO	BIMOTA_DB9	All	
ABIT	KORVET_M11	All	
IGNITECH	IGNIJET_12A	All	
LINK	CAN_500k_BUS_BASE_LCC	All	
LAMBORGHINI	Huracan_GT3_040	All	
BENTLEY	Continental_GT3_040	All	
MERCEDES	GT_GT3_042	All	
AUDI	R8_LMS_GT3_038	All	
PORSCHE	991_GT3_R_041	All	
CORVETTE	C7_GT3_R_0	All	
BMW	M6_GT3_043	All	

#### Upgrade/Bug Fix:

Manufacturer	Model	Compatib.	Description
SEAT_Sport	Leon_TCR	All	Add channels
MERCURY	PORT_OUTER_ENGINE	All	Change CAN bus setting
MERCURY	STARBOARD_OUTER_ENGINE	All	Change CAN bus setting
BOSCH	MS4_SP_T_40CSTX20	All	Change CAN bus setting
BOSCH	MS4_SP_T_40CSTX30	All	Change CAN bus setting
BOSCH	MS44_SP_T_44CSTX20	All	Change CAN bus setting

#### **3.08.11** Mar, 23rd 2016

- Fix on potentiometers management, the travels of which could result zeroed upon software or firmware updates
  - Fix on user interface: previously it was possible to delete AiM tracks
  - Fix on user interface: RS3 prompts a message box when trying to export a configuration being modified
  - Fix on custom sensors: after renaming a custom sensor a RS3 restart was needed before being able to open the sensor again
  - New tracks added
  - Minor improvements



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Version	Date	Change/addit	ions			
3.08.10	Mar, 15th 2016	Fixed bug in configuration when changed ECU protocol				
3.08.09	Mar, 14th 2016	Fixed problem in Race Studio 3 executable file downloading from various browsers, using a new certificate				
3.08.06	Mar 3rd 2016	New ECU drivers added (detailed separately)				
		<ul> <li>Fixed cases in which, after receiving a track from MyChron5, modifying it on the PC and transmitting it back to the MyChron5, the track was shown twice into the MyChron5 tracks menu</li> </ul>				
		Changed the i	nterface of the "Upload to AiM" us	er dialog wind	low	
		In device confi	guration the numbering of bitfield	l values has b	een modified (from "0 -> 7" to "1 -> 8")	
		Minor fixes int	o the track editing window in case	of small track	S	
		New tracks add	ded or modified			
		<ul> <li>Bugfix: if one of the fields used for creating xrk file path included a trailing whitespace the download would abort without notifying user about possible reasons</li> </ul>				
		<ul> <li>Changed UI name in RS3 for SD cards from SmartyCams, in order to avoid possible confusion with EVO5 SD cards</li> <li>RS3 startup speed has been improved</li> </ul>				
		ECU stream re				
		ECO stream re     Manufacturer	Model	Commetile	Description	
		KMS	MD35_ETC	Compatib. All	Description	
		EMS	EM_TECH	All		
		HONDA	Civic_2006_2011	All		
		HONDA	Civic_2012	All		
		MOTEC	M130_BIKE	All		
		MAZDA	MX5_ND	All		
		LIFE	WOLF_CAN	All		
		MERCURY	FCR12	All		
		MOTEC	VCS_TransCompound_Full_500k	All		
		AUDI	TT_Cup_TCR	All		
		SEAT_Sport	Leon_TCR	All		
		CAN2 stream r	eleased:			
		Manufacturer	Model	Compatib.	Description	
		КМР	GCU2	All		
		КМР	PADDELSHIFT	All		
		MEGALINE	PADDELSHIFT	All		



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		Upgrade/Bug	Fix ECUs:		
		Manufacturer	Model	Compatib.	Description
		MAXXECU	CAN	All	Add new channels
		MOTEC	M1	All	Corrected gear management
		PORSCHE	991_911	All	Add channels
		BMW	BMW_PT6	All	Add channels
		BOSCH	ABS_M4_500kbits	All	Add channels
		BOSCH	ABS_M4_1Mbit	All	Add channels
3.08.02	Feb 19th 2016	It requires firm Fixed bug reco Bugfix in web Bug fix for trac Track creation that used to ir RS3 now asks RS3 behaviou Modified the n Small issue fix it could happe Wi-Fi settings RS3 now warr	r for sharing data with AiM ca maximum number of decima for Wi-Fi communication in c en that devices disappeared f for virtualized Windows (Mac ns users in case of a bad confi to system dialogs for file oper	configuration with n create random crass e editing tracks teween the GPS Ma case of small kart t w tracks also while an be modified usin I places for Lambda case of connection form the network to cOS case) have been guration in the dev	hath channels shes anager and the RS3 software racks downloading data, and warns that ig settings->upload icon menu a, milliSec and angle degree to existing network. For this issue o reappear few seconds later
3.08.00	Feb 11th 2016	<ul> <li>EVO5 configu</li> <li>Possibility to i "venue types"</li> </ul>	nsert custom text in downloa	ad fields (for file nar	ne and path) and to customize
		Possibility to s	save data in matlab and csv a	nd kml format whil	e downloading
		Improvement	s in Wi-Fi reliability for MyChr	ron5	
			s in tracks management		
			-		



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# Race Studio 3 Release history

Version						
	Date	Change/additions				
3.07.03	Jan 7th 2016	Some more ne	ew race tracks: Guangdong, Shan	ghai kart, Lock	arp	
			Chron5 RS3 features the new inte anager, while before the MyChro		nager, for all other devices it runs lled for all devices	
		<ul> <li>Bugfix: problems could arise with custom sensors (blank lines into the sensors database) while updating from 3.06.xx to 3.07.xx, now everything is correctly managed</li> </ul>				
		<ul> <li>Bugfix: while in could be wron</li> </ul>	nserting ratios in "Precalculated ( g	Gear" math cha	nnel the resulting value	
3.07.00	Dec 23rd 2015	Track management for MyChron5				
3.06.20	Dec 4th 2015	New WiFi support				
		Customizable	logo			
		<ul> <li>Revised menu system:</li> <li>Track display via menu</li> <li>WiFi status</li> </ul>				
		<ul> <li>System parameters editable via RS3 and menu</li> </ul>				
		-	faster test list handling			
		<ul> <li>Autorecording</li> </ul>	(standard conditions) will not be ed required (avoid false positive		GPS speed alone, RPM	
		<ul> <li>Autorecording or another spe</li> </ul>	(standard conditions) will not be ed required (avoid false positive	s)	GPS speed alone, RPM	
		<ul> <li>Autorecording or another spe</li> <li>Released the fe</li> </ul>	y (standard conditions) will not be eed required (avoid false positive ollowing ECUs: Model			
		<ul> <li>Autorecording or another spe</li> <li>Released the fernal Manufacturer</li> </ul>	) (standard conditions) will not be ed required (avoid false positive ollowing ECUs:	S) Compatib.		
		<ul> <li>Autorecording or another spectrum</li> <li>Released the for Manufacturer LOTUS</li> </ul>	y (standard conditions) will not be eed required (avoid false positive ollowing ECUs: Model Clusters 11 _ Exige Cup R	S) Compatib. All		
		<ul> <li>Autorecording or another spectrum</li> <li>Released the for Manufacturer</li> <li>LOTUS</li> <li>MCLAREN</li> </ul>	ollowing ECUs: Model Clusters 11 _ Exige Cup R 650S	s) Compatib. All All		
		<ul> <li>Autorecording or another spectrum</li> <li>Released the for Manufacturer</li> <li>LOTUS</li> <li>MCLAREN</li> <li>HELFTEC</li> </ul>	y (standard conditions) will not be eed required (avoid false positive ollowing ECUs: Model Clusters 11 _ Exige Cup R 650S ECU 4.1	S) Compatib. All All All		
		<ul> <li>Autorecording or another spectrum</li> <li>Released the for Manufacturer</li> <li>LOTUS</li> <li>MCLAREN</li> <li>HELFTEC</li> <li>PEUGEOT</li> </ul>	ollowing ECUs: Model Clusters 11 _ Exige Cup R 650S ECU 4.1 RCZ_CUP	s) Compatib. All All All All All All		
		<ul> <li>Autorecording or another spector Released the for Manufacturer</li> <li>LOTUS</li> <li>MCLAREN</li> <li>HELFTEC</li> <li>PEUGEOT</li> <li>ALFA ROMEO</li> </ul>	ollowing ECUs: Model Clusters 11 _ Exige Cup R 650S ECU 4.1 RCZ_CUP 4C	S) Compatib. All All All All All All All All		
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		<ul> <li>Autorecording or another spectrum</li> <li>Released the free Manufacturer</li> <li>LOTUS</li> <li>MCLAREN</li> <li>HELFTEC</li> <li>PEUGEOT</li> <li>ALFA ROMEO</li> <li>HONDA</li> <li>HONDA</li> </ul>	<ul> <li>(standard conditions) will not be required (avoid false positive</li> <li>(avoid false positive</li></ul>	s) Compatib. All All All All All All All All All Al		
		<ul> <li>Autorecording or another spector Released the ference LOTUS</li> <li>MCLAREN</li> <li>MELFTEC</li> <li>PEUGEOT</li> <li>ALFA ROMEO</li> <li>HONDA</li> <li>BRP</li> </ul>	(standard conditions) will not beed required (avoid false positive         ollowing ECUs:         Model         Clusters 11 _ Exige Cup R         650S         ECU 4.1         RCZ_CUP         4C         HDS_TAB_10         HDS_TAB_11         SKI_DOO_MXZ_600RS	S) Compatib. All All All All All All All All All Al		
		<ul> <li>Autorecording or another spector Released the for Manufacturer</li> <li>LOTUS</li> <li>MCLAREN</li> <li>HELFTEC</li> <li>PEUGEOT</li> <li>ALFA ROMEO</li> <li>HONDA</li> <li>BRP</li> <li>YAMAHA</li> </ul>	(standard conditions) will not beed required (avoid false positive         Wodel         Clusters 11 _ Exige Cup R         650S         ECU 4.1         RCZ_CUP         4C         HDS_TAB_10         HDS_TAB_11         SKI_DOO_MXZ_600RS         R6_MS_Retail	s) Compatib. All All All All All All All All All Al		
		<ul> <li>Autorecording or another spector Manufacturer</li> <li>LOTUS</li> <li>MCLAREN</li> <li>HELFTEC</li> <li>PEUGEOT</li> <li>ALFA ROMEO</li> <li>HONDA</li> <li>BRP</li> <li>YAMAHA</li> <li>GM</li> </ul>	(standard conditions) will not beed required (avoid false positive         beed required (avoid false positive         Wodel         Clusters 11 _ Exige Cup R         650S         ECU 4.1         RCZ_CUP         4C         HDS_TAB_10         HDS_TAB_11         SKI_DOO_MXZ_600RS         R6_MS_Retail         E67_PERF_ECU	s) Compatib. All All All All All All All All All Al		
		<ul> <li>Autorecording or another spector Released the for Manufacturer</li> <li>LOTUS</li> <li>MCLAREN</li> <li>HELFTEC</li> <li>PEUGEOT</li> <li>ALFA ROMEO</li> <li>HONDA</li> <li>BRP</li> <li>YAMAHA</li> <li>GM</li> <li>PROEFI</li> </ul>	(standard conditions) will not beed required (avoid false positive         wing ECUs:         Model         Clusters 11 _ Exige Cup R         650S         ECU 4.1         RCZ_CUP         4C         HDS_TAB_10         HDS_TAB_11         SKI_DOO_MXZ_600RS         R6_MS_Retail         E67_PERF_ECU         128	S) Compatib. All All All All All All All All All Al		
		<ul> <li>Autorecording or another spectrum</li> <li>Released the formation of Manufacturer</li> <li>LOTUS</li> <li>MCLAREN</li> <li>HELFTEC</li> <li>PEUGEOT</li> <li>ALFA ROMEO</li> <li>HONDA</li> <li>BRP</li> <li>YAMAHA</li> <li>GM</li> <li>PROEFI</li> <li>MECTRONIK</li> </ul>	(standard conditions) will not beed required (avoid false positive         wing ECUs:         Model         Clusters 11 _ Exige Cup R         650S         ECU 4.1         RCZ_CUP         4C         HDS_TAB_10         HDS_TAB_11         SKI_DOO_MXZ_600RS         R6_MS_Retail         E67_PERF_ECU         128         MV_ECU_KIT_476	Compatib.           AII           AII		



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# Race Studio 3 Release history

Version

Date

### Change/additions

AEM	INFINITYV.96CAN	All	
PEUGEOT	Funyo_sp05	All	
JAS	TCR	All	
TURNER	CUSTOM	All	

#### Upgrade/Bug Fix ECUs:

Manufacturer	Model	Compatib.	Description
TOMS	DOME_FIA_F4	All	
MOTEC	M84	All	Add USER 2 channel defined as oil temperature
HALTECH	CAN_V2	All	Fix Bug related on Engine state channel
MARELLI	PROTO_V8	All	Update all channels list
SC	TYPHOON_TORNADO_V3	All	Fix Bug related on speeds channels

### **3.05.02** May 27th 2015

- MXG/MXS display pages improvements:
- New Rally Page
- Added possibility to show odometers and different time fields
- Minor bug fixed
- Released the following ECUs:

Manufacturer	Model	Compatib.	Description
MICROTEC	ТМ	All	
BOSCH	Tuner MS4 E46 M3	All	
FAST	XFI	All	
GM	C7_STINGRAY	All	
MECTRONIK	MK_E7	All	
FUEL_TECH	CAN	All	
MARELLI	FORMULA_MASTERS_CHINA_SERIES	All	
TEVES	MK60_ABS_MS	CAN2	
TEVES	MK60_ABS_STD	CAN2	

### Upgrade/Bug Fix ECUs:

Manufacturer	Model	Compatib.	Description
ΤΟΥΟΤΑ	GT86/SCION_FRS	All	Correction bug related to Water temperature offset
AUDI	CAN_PQ35_P5	All	Added oil temperature 2 channel
MARELLI	SRA_SRAE_SRT	All	Fixed bug related to ECU channels management



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## Race Studio 3 Release history

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Version 3.05.00

Date May 11th 2015

#### Change/additions

- New web updates management: now it is possible to download device firmware even if no device is connected. Devices will be updatable once connected
- Now it is possible to show odometers and lap times information on the display and to remove undesired fields
- Improved start data recording management in order to avoid possible recording failure conditions due to lap channels and odometers
- New encryption management for the configuration of CAN2 and CAN1
- Added math channel to use precalculated gearings
- Introduced 'Clone' possibilities for configurations
- Fixed decimal figures management in analysis of drks from MXG-MXL2: now all places in which a channel is shown are coherent
- Improved autoselection management of xrk files in download window
- Improved test properties and forced values management in RS3 download window
- Improvements and fixes in management of deletion of alarms and math channels
- Minor improvements in user interface
- Minor improvements in the configuration of MXL2 display
- Released the following ECUs:

Manufacturer	Model	Compatib.	Description
ALFA ROMEO	4C	MXL2 MXS MXG	
TOMS	DOME_FIA_F4	MXL2 MXS MXG	

Upgrade/Bug Fix ECUs:

Manufacturer	Model	Compatib.	Description
MBE	9A8998CAN	MXL2 MXS MXG	Correction bug related to 6th gear management
MBE	9A9CAN	MXL2 MXS MXG	Correction bug related to 6th gear management



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# Race Studio 3 Release history

Version	Date	Change/additions				
3.04.08	Mar 24th 2015	Improvement: colors for devices icon in the upper part of the main window				
		Improvement: in download window it is now possible to choose if to automatically select for download all files that still have to be downloaded			choose if to automatically select	
		Improvement: import/export management for custom sensors				
		Improvement: better management of MXG page "Driver page 5 V2"				
		Minor bugs fixing				
3.04.07	Mar 12th 2015	Improvement: on MXG (and coming MXS) it's now possible to use measure colors as an alarm				
		Improvement: download page has been revisited to better manage fields like driver name, v name, track name, etc it's now possible to force their values to values different from those previously inserted				
		Fix/improvement: it's now possible to configure units for GPS Speed, seen as a channel of the device				
		Fix: channel names in math channels definition are now correctly matching				
		Fix: "select folder" window is now working also in Windows XP				
		Fix: upon selecting a sensor, then selecting a new sensor, then going back to the previous it could happen that some parameters were not properly managed				
		Fix: upon creating a "calculated gear" math channel, the display part of the configuration could be missing it's presence				
		Fix: coordinates channels can't now be used any more to create alarms				
		Fix: total potentiometer travel is now better managed for angular potentiometers				
		<ul> <li>Fix: in some cases, selecting "no ECU" in a configuration created with an ECU, the new set was missed</li> </ul>				
		Released the following ECUs:				
		Manufacturer	Model	Compatib.	Description	
		STACK	TPMS_CONTROL_UNIT	All	Add this driver in can2 page selection	
		Upgrade/Bug Fix E	ECUs:			
		Manufacturer	Model	Compatib.	Description	
		FIAT_ABARTH	CAN STANDARD	All	Change ECU model name the last was: CAN	
		EFI_EUROPE	EURO_8	All	Update protocol for new EFI EURO8 firmware	
		BMW	BMW_MINI	All	Correct bug related to Steering angle channel and add gear and 2nd steer angle channels	



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# Race Studio 3 Release history

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Version	Date		
3.03.17	Jan 14th 2015		

### Change/additions

- Fixed crash on sending and receiving configuration
- Minor improvements
- PRS sensors curves corrected
- Upgrade/Bug Fix ECUs:

Manufacturer	Model	Compatib.	Description
SUZUKI	SDS_Protocol	MXL2/MXG	Correction bug related to k-line start up communication
SUZUKI	RMZ	MXL2/MXG	Correction bug related to k-line start up communication

- 3.03.14 Dec 23rd 2014 Fixed crash that appears when you try to use RS3 on a Surface computer with Windows 8 and touch screen enabled
  - Updated user strings
  - Improvement in window of measure position settings
  - Released the following ECUs:

Manufacturer	Model	Compatib.	Description
SCCA Enterprises	Formula Enterprises	All	
SCCA Enterprises	Spec Racer Ford, GEN3A	All	
BLACK_BOX	M3	All	
OLSBERGS	MSE	All	
PERFORMANCE_EL	ECU_PE3	All	Renamed old ECU_EDGE

#### Upgrade/Bug Fix ECUs:

Manufacturer	Model	Compatib.	Description
MARELLI	SRA_SRAE_SRT	All	Changed gear channel measure

3.03.12 Dec 16th 2014 • Minor improvements on ECU channels, gear calibration, custom sensors and odometers

- Fixed PT100 management issue
- Fixed crash while opening software and opening configurations
- **3.03.10** Dec 9th 2014 General improvements and minor bugs fixed



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# Race Studio 3 Release history

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Version **3.03.09**  Date Nov 28th 2014

### Change/additions

- Editbox, bug fixed: now, if you type ".361" you get "0.361" and not 361.0
- It is possible to execute a download from more than one device in parallel
- Editbox: custom sensors names now are 26 character max
- Bug fixed in Channel Expansion udm
- Set Parameters: balloon tooltip now is available
- Internal gyro and acc frequency from 20Hz to 50Hz
- Bug fixed in speed pulses "not set" in channel choices now only when it makes sense
- New math channels management
- New parameters management for angular speed
- ECUS: lambda fid bug fixed
- MXG calculated gear now available in the display