



MXL2 Release history

Version	Date	Change/additions
01.30.44	May, 2nd 2022	<ul style="list-style-type: none">▪ Fixed digital speed parameters from RS3 configuration setup External modules No changes
01.30.38	Feb, 18th 2022	<ul style="list-style-type: none">▪ Added GPS09B device support External modules <ul style="list-style-type: none">▪ 02.38.03 GPS09B

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01.30.30	Aug, 6th 2021	<ul style="list-style-type: none">▪ Fixed bad GPS data synchronization (that caused shorter lap times and GPS speed acquisition) External modules <ul style="list-style-type: none">▪ 02.36.64 GPS09 Module
01.30.06	Nov, 25th 2020	<ul style="list-style-type: none">▪ Added GPS09 support External modules <ul style="list-style-type: none">▪ 35.65 GPS Module: Fix Masterclock received from master that caused bad values in GPS data timestamp
01.30.00	Jun, 9th 2020	<ul style="list-style-type: none">▪ Race Simulators handling▪ Added Hour/Date info from GPS tracks▪ Added reference speed used to calculate odometers▪ Improved k-line handling External modules <p>No changes</p>
01.28.20	Dec, 4th 2019	<ul style="list-style-type: none">▪ Improved setting of LEDs brightness▪ Fixed issue on CAN bus off handling of ECU CAN line▪ Improved synchronization between data from GPS and local data acquisition External modules <ul style="list-style-type: none">▪ 35.64 GPS Module<ul style="list-style-type: none">▪ Improved synchronization between data from GPS and local data acquisition
01.28.10	Jul, 5th 2019	<ul style="list-style-type: none">▪ Fixed bug in Channel Expansion/TCHub firmware that caused blinking in Race Studio 3 Live Measures External modules <ul style="list-style-type: none">▪ 40.63 Channel Expansion/TC Hub<ul style="list-style-type: none">▪ Fixed bug that caused blinking in Race Studio 3 Live Measures
01.28.08	Jun, 12th 2019	<ul style="list-style-type: none">▪ Fixed CAN protocols with multiplex frames External modules <ul style="list-style-type: none">▪ 40.62 Channel Expansion/TC Hub▪ 35.61 GPS Module

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01.28.03	Feb, 12th 2019	<ul style="list-style-type: none">▪ Fixed display artifacts in measures value cleaning External modules <ul style="list-style-type: none">▪ 01.26.49 GS-Dash<ul style="list-style-type: none">▪ Measures timeout improved▪ Spansion support▪ Fix data recall synchronization issue▪ 01.26.48 Memory Module<ul style="list-style-type: none">▪ Improved support for various models of SD cards▪ 02.26.51 Shift Light Module<ul style="list-style-type: none">▪ Fixed issues with some ECUs No changes for the other modules
01.26.46	Dec, 5th 2018	<ul style="list-style-type: none">▪ Added management of Shift Light Module External modules <p>No changes</p>
01.26.38	Oct, 5th 2018	<ul style="list-style-type: none">▪ Added possibility to force channels in Online▪ Fixed bug on Digital output priority handling External modules <p>No changes</p>
01.26.28	Apr, 12th 2018	- No changes -
01.26.25	Jan 11th 2018	<ul style="list-style-type: none">▪ Fixed bug when the Start Data Recording standard condition is configured: in some conditions it caused not recorded data▪ Fixed bug in volume sensors with gallons unit measure External modules <ul style="list-style-type: none">▪ 01.26.22 Memory Module▪ 35.58 GPS Module▪ 25.47 Lambda▪ 40.61 Channel Expansion/TC Hub▪ 70.03 Remote buttons interface

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01.26.24	Nov 14th 2017	- No changes -
01.26.23	Oct 24th 2017	<ul style="list-style-type: none">▪ Support for CAN builder ID mask feature▪ Consumed fuel channel▪ Fix: Pulse per wheel revolution setting not working for Speed1 or Speed2 digital inputs▪ Fix: wrong order of operands in bias math channel External modules <ul style="list-style-type: none">▪ 01.26.22 Memory Module▪ 35.58 GPS Module▪ 25.46 Lambda▪ 40.60 Channel Expansion/TC Hub▪ 70.03 Remote buttons interface
01.26.14	Jul 7th 2017	<ul style="list-style-type: none">▪ Improved CAN management: more reliability in firmup and configuration transmission External modules <ul style="list-style-type: none">▪ 01.26.14 Memory Module▪ 35.58 GPS Module▪ 25.46 Lambda▪ 40.60 Channel Expansion/TC Hub: minor bugs fixed▪ 70.03 Remote buttons interface
01.26.08	Jun 20th 2017	<ul style="list-style-type: none">▪ Memory Module support External modules <ul style="list-style-type: none">▪ 01.26.08 Memory Module▪ 35.58 GPS Module▪ 25.46 Lambda▪ 40.60 Channel Expansion/TC Hub: minor bugs fixed▪ 70.01 Remote buttons interface
01.24.54	May 19th 2017	<ul style="list-style-type: none">▪ Includes firmware GPS v 35.58.00 that fixes data synchronization with SmartyCam HD External modules <ul style="list-style-type: none">▪ 35.58 GPS Module▪ 25.46 Lambda▪ 40.60 Channel Expansion/TC Hub: minor bugs fixed▪ 70.01 Remote buttons interface

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Version	Date	Change/additions
01.24.52	May 18th 2017	<ul style="list-style-type: none">▪ Added support for new display configuration (RaceStudio3 v 3.15.00 required) External modules <ul style="list-style-type: none">▪ 35.56 GPS Module▪ 25.46 Lambda▪ 40.60 Channel Expansion/TC Hub: minor bugs fixed▪ 70.01 Remote buttons interface
01.24.14	Mar 24th 2017	<ul style="list-style-type: none">▪ Fixed bug that caused no data from channels with hysteresis External modules <ul style="list-style-type: none">▪ 35.56 GPS Module▪ 25.46 Lambda▪ 40.56 Channel Expansion/TC Hub▪ 70.01 Remote buttons interface
01.24.13	Mar 24th 2017	<ul style="list-style-type: none">▪ Improved accelerometer support: better filtering and uniform sign convention on various devices▪ Fixed occasional spikes on accelerometer channels External modules <ul style="list-style-type: none">▪ 35.56 GPS Module▪ 25.46 Lambda▪ 40.56 Channel Expansion/TC Hub▪ 70.01 Remote buttons interface
01.24.00	Jan 26th 2017	<ul style="list-style-type: none">▪ Fixed issue that caused CAN network malfunction when remote button device is in the network External modules <ul style="list-style-type: none">▪ 35.56 GPS Module▪ 25.46 Lambda▪ 40.56 Channel Expansion/TC Hub▪ 70.01 Remote buttons interface
01.22.99	Jan 19th 2017	<ul style="list-style-type: none">▪ Added management of GPS position accuracy measure for display and CAN output External modules <ul style="list-style-type: none">▪ 35.56 GPS Module▪ 25.46 Lambda▪ 40.56 Channel Expansion/TC Hub▪ 70.01 Remote buttons interface

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01.22.94	Dec 5th 2016	<ul style="list-style-type: none">▪ No changes External modules <ul style="list-style-type: none">▪ 35.56 GPS Module▪ 25.46 Lambda: fixed bug that caused shifted lambda samples▪ 40.56 Channel Expansion/TC Hub▪ 70.01 Remote buttons interface
01.22.92	Nov 29th 2016	<ul style="list-style-type: none">▪ Fixed bug which prevented editing of Wi-Fi and User parameters from RS3▪ Minor improvements External modules <ul style="list-style-type: none">▪ 35.56 GPS Module: improvements in GPS measurements available to SmartyCam overlay▪ 25.44 Lambda▪ 40.56 Channel Expansion/TC Hub▪ 70.01 Remote buttons interface
01.22.86	Nov 15th 2016	<ul style="list-style-type: none">▪ Added IRM CAN LAP support <p>Warning: this firmware release requires Race Studio 3 ver. 3.10.10 or higher.</p> External modules <ul style="list-style-type: none">▪ 35.54 GPS Module: improved satellites fix▪ 25.44 Lambda: added keep alive support▪ 40.56 Channel Expansion/TC Hub▪ 70.01 Remote buttons interface
01.22.82	Oct 11th 2016	<ul style="list-style-type: none">▪ Speed up USB transfer▪ Fixed bug in GPS lap management that in some cases caused loss of laps detected <p>Warning: this firmware release requires Race Studio 3 ver. 3.10.10 or higher.</p> External modules <ul style="list-style-type: none">▪ 35.50 GPS Module▪ 25.42 Lambda▪ 40.56 Channel Expansion/TC Hub: improved analogic channels acquisition▪ 70.01 Remote buttons interface

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Version	Date	Change/additions
01.22.74	Sep 15th 2016	<ul style="list-style-type: none">▪ Fixed alarms functionality based on acquisition channels under encryption <p>Warning: this firmware release requires Race Studio 3 ver. 3.10.10 or higher.</p> <p>External modules</p> <ul style="list-style-type: none">▪ 35.50 GPS Module▪ 25.42 Lambda▪ 40.55 Channel Expansion/TC Hub▪ 70.01 Remote buttons interface
01.22.60	Jul 25th 2016	<ul style="list-style-type: none">▪ New: test data recall▪ Fixed: clear alarm by remote buttons▪ Fixed: Wi-Fi troubles with TP-link routers▪ Fixed: alarm hysteresis condition▪ Minor bugfixes and improvements <p>Warning: this firmware release requires Race Studio 3 ver. 3.10.10 or higher.</p> <p>External modules</p> <ul style="list-style-type: none">▪ 35.50 GPS Module▪ 25.42 Lambda▪ 40.55 Channel Expansion/TC Hub▪ 70.01 Remote buttons interface
01.22.16	Jun 17th 2016	<ul style="list-style-type: none">▪ Minor improvements <p>Warning: this firmware release requires Race Studio 3 ver. 3.10.10 or higher.</p> <p>External modules</p> <ul style="list-style-type: none">▪ 35.50 GPS Module▪ 25.42 Lambda▪ 40.55 Channel Expansion/TC Hub▪ 70.01 Remote buttons interface

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Version	Date	Change/additions
01.22.14	Jun 10th 2016	<ul style="list-style-type: none">▪ New track management, compatible with the MyChron5 one <p>Warning: this firmware release requires Race Studio 3 ver. 3.10.10 or higher.</p> <p>External modules</p> <ul style="list-style-type: none">▪ 35.50 GPS Module▪ 25.42 Lambda (fixed issues with channels configured at 5Hz)▪ 40.55 Channel Expansion/TC Hub: improvement in measurements accuracy▪ 70.01 Remote buttons interface
01.18.21	Apr 19th 2016	<ul style="list-style-type: none">▪ CAN output support <p>External modules</p> <ul style="list-style-type: none">▪ 35.50 GPS Module▪ 25.42 Lambda (fixed issues with channels configured at 5Hz)▪ 40.55 Channel Expansion/TC Hub: improvement in measurements accuracy▪ 70.01 Remote buttons interface
01.18.18	Mar 11th 2016	<ul style="list-style-type: none">▪ Fixed problem with calculated gear channel in graphic display▪ Fixed bug in Custom Position Sensor (the measure was multiplied by 1000)▪ Fixed bug in negative measures displayed by SmartyCam▪ Wi-Fi robustness improvements▪ New menu option for manually adjustable display brightness <p>External modules</p> <ul style="list-style-type: none">▪ 35.50 GPS Module▪ 25.42 Lambda (fixed issues with channels configured at 5Hz)▪ 40.54 Channel Expansion/TC Hub▪ 70.01 Remote buttons interface
01.18.12	Feb 17th 2016	<ul style="list-style-type: none">▪ Increased numbers of CAN2 channels to 80▪ Fixed gear calibration issue▪ Fixed +12 Time Zone that was missing from menu <p>External modules</p> <ul style="list-style-type: none">▪ 35.50 GPS Module▪ 25.40 Lambda▪ 40.54 Channel Expansion/TC Hub▪ 70.01 Remote buttons interface

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Version	Date	Change/additions
01.18.07	Dec 23rd 2015	<ul style="list-style-type: none">▪ Missing default AiM logo added External modules <ul style="list-style-type: none">▪ 35.50 GPS Module▪ 25.40 Lambda▪ 40.54 Channel Expansion/TC Hub▪ 70.01 Remote buttons interface
01.18.06	Dec 4th 2015	<ul style="list-style-type: none">▪ New WiFi support▪ Customizable logo▪ Revised menu system:<ul style="list-style-type: none">▪ Track display via menu▪ WiFi status▪ System parameters editable via RS3 and menu▪ Improved and faster test list handling▪ Autorecording (standard conditions) will not be triggered by GPS speed alone, RPM or another speed required (avoid false positives) External modules <ul style="list-style-type: none">▪ 35.50 GPS Module▪ 25.40 Lambda▪ 40.54 Channel Expansion/TC Hub▪ 70.01 Remote buttons interface
01.14.59	Nov 10th 2015	<ul style="list-style-type: none">▪ Support for new board revisions which allow powering off the WiFi module (MXG rev C , MXL2 rev E) External modules <ul style="list-style-type: none">▪ 35.50 GPS Module▪ 25.40 Lambda▪ 40.52 Channel Expansion/TC Hub▪ 70.01 Remote buttons interface
01.14.58	Sep 9th 2015	<ul style="list-style-type: none">▪ Fixed bug: minor fix affecting SEAT_SPORT Leon MK3 protocols External modules <ul style="list-style-type: none">▪ 35.50 GPS Module▪ 25.40 Lambda▪ 40.52 Channel Expansion/TC Hub▪ 70.01 Remote buttons interface

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Version	Date	Change/additions
01.14.57	Aug 6th 2015	<ul style="list-style-type: none">▪ Fixed bug: the measures from CAN Expansions were not displayed on SmartyCam External modules <ul style="list-style-type: none">▪ 35.50 GPS Module▪ 25.40 Lambda▪ 40.52 Channel Expansion/TC Hub▪ 70.01 Remote buttons interface
01.14.56	Jun 23rd 2015	<ul style="list-style-type: none">▪ Fixed bug in MXL2 preventing the update of segment display upon page change External modules <ul style="list-style-type: none">▪ 35.50 GPS Module▪ 25.40 Lambda▪ 40.52 Channel Expansion/TC Hub▪ 70.01 Remote buttons interface
01.14.55	Jun 23rd 2015	<ul style="list-style-type: none">▪ Implemented display luminosity management (Night Vision setting in Display menu: OFF/ON/AUTO)▪ Remote buttons interface handling added▪ CAN 2G max frame frequency up to 200 Hz▪ Minor bugfixes External modules <ul style="list-style-type: none">▪ 35.50 GPS Module▪ 25.40 Lambda▪ 40.52 Channel Expansion/TC Hub▪ 70.01 Remote buttons interface
01.14.44	Jun 4th 2015	<ul style="list-style-type: none">▪ Expansion communication problems: some systems produced with V1.14.42 did not contain expansions firmwares. Upgrading to this version fixes the issue.▪ Fixed bug: sometimes the change of color of colored measures was delayed w.r.t. the triggering event▪ Minor bugfixes External modules <ul style="list-style-type: none">▪ 35.50 GPS Module▪ 25.40 Lambda▪ 40.52 Channel Expansion/TC Hub

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01.14.42	May 21st 2015	<ul style="list-style-type: none">▪ Fixed bug on gear calculation when the used speed is GPS speed External modules <ul style="list-style-type: none">▪ 35.50 GPS Module▪ 25.40 Lambda▪ 40.52 Channel Expansion/TC Hub
01.14.41	May 19th 2015	<ul style="list-style-type: none">▪ Improved MXL2 display handling solving possible refresh issues▪ Fixed bug: after firmup in some conditions the CAN peripheral configuration may be corrupted (missing channels)▪ Other minor bugfixes External modules <ul style="list-style-type: none">▪ 35.50 GPS Module▪ 25.40 Lambda▪ 40.52 Channel Expansion/TC Hub
01.14.38	May 11th 2015	<ul style="list-style-type: none">▪ Date/Time automatic synchronization to GPS time in addition to PC, preserving time zone setting▪ Odometers and lap times can be used as generic display measures▪ Implemented exit timeout from Messages and Popups according to configuration▪ New menu system: Date time (Time zone, DST, time format), Odometers, System Info▪ CAN 1/2 encrypted format management▪ Alarms/event management improvement External modules <ul style="list-style-type: none">▪ 35.50 GPS Module▪ 25.38 Lambda▪ 40.51 Channel Expansion
01.12.55	Apr 30th 2015	<ul style="list-style-type: none">▪ Added compatibility with RS232 ECU line at 55750 baud
01.12.54	Apr 8th 2015	<ul style="list-style-type: none">▪ Fixed bug missing track selected in download file▪ Added save last display page▪ Showed laptime field name till the first lap acquired External modules <ul style="list-style-type: none">▪ 35.50 GPS Module▪ 25.39 Lambda▪ 40.52 Channel Expansion/TC Hub

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01.12.50	Mar 26th 2015	<ul style="list-style-type: none">▪ Fixed the time displayed in AM and PM format, that was sometimes wrong▪ The number of possible total events (used by alarms, popups, messages, etc) has been raised to 48▪ Fixed some problems in deleting existing recordings▪ Fixed misbehavior in event handlings (e.g. disabling did not always work)▪ Improved crank management▪ Improved firmware upgrade robustness <p>External modules</p> <ul style="list-style-type: none">▪ 35.50 GPS Module▪ 25.38 Lambda▪ 40.51 Channel Expansion
01.12.44	Mar 13th 2015	<ul style="list-style-type: none">▪ Added the menu voice "Reset Gear Calc" when the gear calculated channel is configured▪ Bug fixing:<ul style="list-style-type: none">▪ ECU protocols management with more than 64 channels when some of them are disabled▪ Bias math channel▪ Sensors calibration▪ Predictive algorithm with GPS speed▪ Improved gear calculation algorithm▪ Graphic display when the measures are cleaned
01.12.24	Jan 23rd 2015	<ul style="list-style-type: none">▪ Start and stop recording time increased to 3 sec.▪ Bug fixing:<ul style="list-style-type: none">▪ Shift light management in dot mode▪ RPM /3▪ Alarm management▪ GPS speed usage on SmartyCam and in logging strategy▪ Digital speed calculation (in case of more than one speed)▪ Minor bug fix <p>External modules</p> <ul style="list-style-type: none">▪ 35.50 GPS Module▪ 25.35 Lambda▪ 40.46 Channel Exp./TC Hub
01.12.08	Dec 5th 2014	<ul style="list-style-type: none">▪ Improvements and some bugs fixed in calibration, digital outputs, data memo and popup alarm messages