

June, 9th 2020

MXS Release history

| Page | 1 |
|------|---|
|------|---|

| Version | Date | Change/additions |
|----------|----------------|--|
| 01.30.00 | Jun, 9th 2020 | Race Simulators handling Added Hour/Date info from GPS tracks Added reference speed used to calculate odometers Improved k-line handling External modules No changes |
| 01.28.20 | Dec, 4th 2019 | 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 35.64 GPS Module Improved synchronization between data from GPS and local data acquisition |
| 01.28.10 | Jul, 5th 2019 | Fixed bug in Channel Expansion/TCHub firmware that caused blinking in Race Studio 3 Live Measures External modules 40.63 Channel Expansion/TC Hub Fixed bug that caused blinking in Race Studio 3 Live Measures |
| 01.28.08 | Jun, 12th 2019 | Fixed CAN protocols with multiplex frames External modules 40.62 Channel Expansion/TC Hub 35.61 GPS Module |



June, 9th 2020

MXS Release history

| Version | Date | Change/additions |
|----------|----------------|--|
| 01.28.03 | Feb, 12th 2019 | Fixed display artifacts in measures value cleaning |
| | | External modules |
| | | 01.26.49 GS-Dash |
| | | Measures timeout improved Spansion support |
| | | Fix data recall synchronization issue |
| | | 01.26.48 Memory Module |
| | | Improved support for various models of SD cards |
| | | 02.26.51 Shift Light Module Fixed issues with some ECUs |
| | | No changes for the other modules |
| | | |
| 01.26.46 | Dec, 5th 2018 | Added management of Shift Light Module |
| | , | Added the support for auto brightness levels configuration (day brightness level, night brightness |
| | | level and threshold are now fully configurable) |
| | | External modules |
| | | No changes |
| | | |
| 01.26.42 | Oct, 30th 2018 | Support for CAN Optical Lap (IRM_42) |
| | | Set Brightness Mode using Remote button fix |
| | | CAN Bus 120 Ohm Resistor setting fix |
| | | Optical Beacon blind time fix |
| | | External modules |
| | | No changes |
| | | |
| 01.26.38 | Oct, 5th 2018 | Added possibility to force channels in Online |
| | | Fixed bug on Digital output priority handling |
| | | External modules |
| | | No changes |
| 01.26.28 | Apr, 12th 2018 | = Added remote display management |
| 01.20.20 | קי, יבנוי בטיס | Added remote display management |
| | | External modules |
| | | 01.26.22 Memory Module |
| | | 01.26.28 GS-Dash 01.26.28 Formula Steering Wheel 3 |
| | | - • HEOLO FORMUL SECTING WREETS |



June, 9th 2020

MXS Release history

| ., · | | | |
|----------|---------------|--|-----------|
| Version | Date | Change/additions | |
| | | 35.58 GPS Module | |
| | | 25.47 Lambda | |
| | | 40.61 Channel Expansion/TC Hub | |
| | | 70.03 Remote buttons interface | |
| 01.26.25 | Jan 11th 2018 | Fixed bug when the Start Data Recording standard condition is configured: in some c it caused not recorded data | onditions |
| | | Fixed bug in volume sensors with gallons unit measure | |
| | | External modules | |
| | | 01.26.22 Memory Module | |
| | | 35.58 GPS Module | |
| | | 25.47 Lambda | |
| | | 40.61 Channel Expansion/TC Hub | |
| | | 70.03 Remote buttons interface | |
| 01.26.24 | Nov 14th 2017 | No changes - | |
| 01.26.23 | Oct 24th 2017 | Support for CAN builder ID mask feature | |
| | | Consumed fuel channel | |
| | | Fix: Pulse per wheel revolution setting not working for Speed1 or Speed2 digital inpu | ts |
| | | Fix: wrong order of operands in bias math channel | |
| | | External modules | |
| | | 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 | Improved CAN management: more reliability in firmup and configuration transmissic | 'n |
| | | External modules | |
| | | 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 | |
| | | | |
| | | | |



June, 9th 2020

MXS Release history

| Version | Date | Change/additions |
|----------|---------------|---|
| 01.26.08 | Jun 20th 2017 | Memory Module support |
| | | External modules |
| | | 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 | Includes firmware GPS v 35.58.00 that fixes data synchronization with SmartyCam HD |
| | | External modules |
| | | 35.58 GPS Module |
| | | 25.46 Lambda |
| | | 40.60 Channel Expansion/TC Hub: minor bugs fixed |
| | | 70.01 Remote buttons interface |
| 01.24.52 | May 18th 2017 | Added support for new display configuration (RaceStudio3 v 3.15.00 required) |
| | | External modules |
| | | 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 | Fixed bug that caused no data from channels with hysteresis |
| | | External modules |
| | | 35.56 GPS Module |
| | | 25.46 Lambda |
| | | 40.56 Channel Expansion/TC Hub |
| | | 70.01 Remote buttons interface |
| 01.24.13 | Mar 24th 2017 | Improved accelerometer support: better filtering and uniform sign convention on various devices |
| - | - | Fixed occasional spikes on accelerometer channels |
| | | |



June, 9th 2020

MXS Release history

| Version | Date | Change/additions |
|----------|---------------|---|
| | | External modules |
| | | 35.56 GPS Module |
| | | 25.46 Lambda |
| | | 40.56 Channel Expansion/TC Hub |
| | | 70.01 Remote buttons interface |
| | | |
| 01.24.00 | Jan 26th 2017 | Fixed issue that caused CAN network malfunction when remote button device is in the network |
| | | External modules |
| | | 35.56 GPS Module |
| | | 25.46 Lambda |
| | | 40.56 Channel Expansion/TC Hub |
| | | 70.01 Remote buttons interface |
| | | |
| 01.22.99 | Jan 19th 2017 | Added management of GPS position accuracy measure for display and CAN output |
| | | Fixed bug in "Backlight" menu voice (icon missed) |
| | | |
| | | External modules |
| | | 35.56 GPS Module |
| | | 25.46 Lambda |
| | | 40.56 Channel Expansion/TC Hub |
| | | 70.01 Remote buttons interface |
| | | |
| 01.22.94 | Dec 5th 2016 | No changes |
| | | External modules |
| | | 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 | Fixed bug which prevented editing of Wi-Fi and User parameters from RS3 |
| | | Minor improvements |
| | | External modules |
| | | 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 |
| | | |



June, 9th 2020

MXS Release history

| Version | Date | Change/additions |
|----------|---------------|---|
| 01.22.86 | Nov 15th 2016 | Added IRM CAN LAP support |
| | | Warning: this firmware release requires Race Studio 3 ver. 3.10.10 or higher. |
| | | External modules |
| | | 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 | Speed up USB transfer |
| | | Speed up display pages loading at the startup |
| | | Fixed bug in GPS lap management that in some cases caused loss of laps detected |
| | | Warning: this firmware release requires Race Studio 3 ver. 3.10.10 or higher. |
| | | External modules |
| | | 35.50 GPS Module |
| | | 25.42 Lambda |
| | | 40.56 Channel Expansion/TC Hub: improved analogic channels acquisition |
| | | 70.01 Remote buttons interface |
| 01.22.74 | Sep 15th 2016 | Fixed alarms functionality based on acquisition channels under encryption |
| | | Fixed message alarms that sometimes were partially or totally erased |
| | | Warning: this firmware release requires Race Studio 3 ver. 3.10.10 or higher. |
| | | External modules |
| | | 35.50 GPS Module |
| | | 25.42 Lambda |
| | | 40.55 Channel Expansion/TC Hub |
| | | 70.01 Remote buttons interface |
| 01.22.60 | Jul 25th 2016 | Fixed: clear alarm by remote buttons |
| | | Fixed: Wi-Fi troubles with TP-link routers |
| | | Fixed: alarm hysteresis condition |
| | | Minor bugfixes and improvements |
| | | Warning: this firmware release requires Race Studio 3 ver. 3.10.10 or higher. |
| | | |



June, 9th 2020

MXS Release history

| Version | Date | Change/additions |
|----------|------------------|--|
| | | External modules |
| | | 35.50 GPS Module |
| | | 25.42 Lambda |
| | | 40.55 Channel Expansion/TC Hub |
| | | 70.01 Remote buttons interface |
| 01.22.16 | Jun 17th 2016 | Fixed display issue when 8 pages are configured |
| 01.22.10 | 54117112010 | Minor improvements |
| | | |
| | | Warning: this firmware release requires Race Studio 3 ver. 3.10.10 or higher. |
| | | External modules |
| | | 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 |
| 01.22.14 | Jun 10th 2016 | New track management, compatible with the MyChron5 one |
| | | Test data recall |
| | | Warning: this firmware release requires Race Studio 3 ver. 3.10.10 or higher. |
| | | External modules |
| | | 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 | CAN output support |
| 01110.21 | , pr 19 (12 01 0 | External modules |
| | | 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 | Fixed bug in Custom Position Sensor (the measure was multiplied by 1000) |
| | | Fixed bug in negative measures displayed by SmartyCam |



Version

01.18.12

01.18.07

01.18.06

AiM Firmware Documentation

June, 9th 2020

Page 8

MXS Release history

Change/additions Date Wi-Fi robustness improvements New menu option for manually adjustable display brightness **External modules 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 Feb 17th 2016 Increased numbers of CAN2 channels to 80 Fixed gear calibration issue Fixed +12 Time Zone that was missing from menu **External modules 35.50** GPS Module **25.40** Lambda **40.54** Channel Expansion/TC Hub 70.01 Remote buttons interface Dec 23rd 2015 Missing default AiM logo added **External modules 35.50** GPS Module **25.40** Lambda **40.54** Channel Expansion/TC Hub **70.01** Remote buttons interface Dec 4th 2015 New WiFi support Customizable logo Revised menu system: 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)



June, 9th 2020

MXS Release history

| Version | Date | Change/additions |
|----------|----------------|---|
| VEISION | Date | |
| | | External modules |
| | | 35.50 GPS Module |
| | | 25.40 Lambda |
| | | 40.54 Channel Expansion/TC Hub |
| | | 70.01 Remote buttons interface |
| | | |
| 01.14.59 | Nov 10th 2015 | Support for new board revisions which allow powering off the WiFi module (MXG rev C , MXL2 rev E) |
| | | External modules |
| | | 35.50 GPS Module |
| | | 25.40 Lambda |
| | | 40.52 Channel Expansion/TC Hub |
| | | 70.01 Remote buttons interface |
| | | |
| 01.14.58 | Sep 9th 2015 | Fixed bug: minor fix affecting SEAT_SPORT Leon MK3 protocols |
| | | External modules |
| | | 35.50 GPS Module |
| | | 25.40 Lambda |
| | | 40.52 Channel Expansion/TC Hub |
| | | 70.01 Remote buttons interface |
| | | |
| 01.14.57 | Aug 6th 2015 | Fixed bug: the measures from CAN Expansions were not displayed on SmartyCam |
| | | External modules |
| | | 35.50 GPS Module |
| | | 25.40 Lambda |
| | | 40.52 Channel Expansion/TC Hub |
| | | 70.01 Remote buttons interface |
| | | |
| 01.14.56 | Jun 23rd 2015 | Same as 1.14.55 (this version contains MXL2-only changes) |
| 01114.50 | 5411 2514 2015 | External modules |
| | | 35.50 GPS Module |
| | | = 25.40 Lambda |
| | | 40.52 Channel Expansion/TC Hub |
| | | 70.01 Remote buttons interface |
| | | |
| | | |



June, 9th 2020

MXS Release history

| ., · | | |
|----------|---------------|---|
| Version | Date | Change/additions |
| 01.14.55 | Jun 23rd 2015 | 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 |
| | | 35.50 GPS Module |
| | | 25.40 Lambda |
| | | 40.52 Channel Expansion/TC Hub |
| | | 70.01 Remote buttons interface |
| | | |
| 01.14.44 | Jun 4th 2015 | 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 |
| | | 35.50 GPS Module |
| | | 25.40 Lambda |
| | | 40.52 Channel Expansion/TC Hub |
| | | |
| 01.14.42 | May 21st 2015 | Fixed bug on gear calculation when the used speed is GPS speed |
| | | External modules |
| | | 35.50 GPS Module |
| | | = 25.40 Lambda |
| | | 40.52 Channel Expansion/TC Hub |
| | | |
| 01.14.41 | May 19th 2015 | Fixed bug: after firmup in some conditions the CAN peripheral configuration may be corrupted (missing channels) |
| | | Other minor bugfixes |
| | | External modules |
| | | 35.50 GPS Module |
| | | 25.40 Lambda |
| | | 40.52 Channel Expansion/TC Hub |
| | | |



June, 9th 2020

MXS Release history

| Version | Date | Change/additions |
|----------|---------------|--|
| 01.14.38 | May 11th 2015 | 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 |
| | | 35.50 GPS Module |
| | | 25.40 Lambda |
| | | 40.52 Channel Expansion/TC Hub |
| 01.12.55 | Apr 30th 2015 | Added compatibility with RS232 ECU line at 55750 baud |
| 01.12.54 | Apr 8th 2015 | Fixed bug missing track selected in download file |
| | · | Added save last display page |
| | | External modules |
| | | 35.50 GPS Module |
| | | 25.39 Lambda |
| | | 40.52 Channel Expansion/TC Hub |
| | | |
| 01.12.50 | Mar 26th 2015 | 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 |
| | | External modules |
| | | 35.50 GPS Module |
| | | 25.38 Lambda |
| | | 40.51 Channel Expansion |
| 01.12.44 | Mar 13th 2015 | First official release |
| | | |