This is a Life Racing Advance Software distribution list email.

Software sent to this list is new and has had minimal testing only. ECU software may not have run on an engine yet. The intent is for you to have advance visibility of builds compared to the general dealer list, which receives builds two weeks later.

Please keep testing in-house for that period, or at least until you have personally verified that everything is working acceptably. Thank you.

ANDY

LifeDash – 2.15.312 to 2.15.337

Warning

* + Any Zero-Offset or item persistence setting will be lost on upgrading to main code 1.5.0
  + Once the value is re-applied, it will be remembered

Features

* Support for new main codes 1.4.20, 1.4.21, 1.5.0 and 1.6.x
* Added LifeData functionality to LifeDash
  + Decoding of LRS files or folder to LRD
  + Option for automatic decoding of downloaded LRS files to LRD
  + Option to load latest downloaded LRD file immediately in LifeView
  + Option to support LRD suffix (run number)
  + Option to export LRD data as CSV
* Logging data download or clear now allowed during dev\connect session
* Bugfix – user access update prevented root’s ability to edit alternate units on imported F88 data streams
* Enhanced GPS timeslip for main code 1.6.0
  + Create GPS reference lap from LRD data
  + Add viewer for reference laps
  + Add ability to overlay LRD track data on top of reference lap
  + Add GPS coords of mouse to reference lap viewer
* Enhanced User Access for main code 1.5.0
  + Duplicates LifeCal’s Comment user access
  + Remove user access to
    - No of pages
    - Disable Ethernet and Flash IN-RACE notifications
  + Add fine grained configurable edit access to item attributes on ITEMS tab
  + Prevent users moving read only pages
  + Default all new calibrations to LIMITED user access
* Add checkboxes to disable Ethernet and Flash notifications on a page by page basis (1.5.0)
* User access to RPM LEDS calibration
* Add Close to file menu
* Add "Clear Internal Logging" to device menu
* Add option to disable page tabs, checkbox on display tab (1.4.21)
* Add checkbox on display tab to make all pages read only (no user editing)

Dash Firmware

MAIN CODE

Main Code 1.6.6

Requires boot 4.26

New monitoring item mmcLogFiles gives total number of internally logged files

Internal logging icon now displays total number of files

bugfix – possible download failure on 2nd download in single LifeDash session

Main Code 1.6.5

Requires boot 4.26

timeSlip - separate GPS and distance based algorithms and only choose based on EnableGpsTimeSlip checkbox on MISC tab

bugfix - only use GPS lat & long to determine if there has been movement

* + - removing possibility of AG50.1.speed when set as SPEED triggering current lap update when no GPS lock

Main Code 1.6.4

Requires boot 4.26

Bugfix – prevent timeslip processing when reference lap empty

Fine tune timeslip timeouts for more reliable updates

Main Code 1.6.3

Requires boot 4.26

Increase GPS timeslip updates to 5 a second

Increase timeout on GPS timeslip resyncs to reduce risk of one resync causing another

bugfix - possible div zero could cause spike in timeSlip

Add new monitoring item dbTimeSlipGpsHits - counts timeslip updates (should be 5 a second)

Main Code 1.6.2

Requires boot 4.26

Add On-Screen change lights option (D4 has no LED change lights)

Main Code 1.6.1

Requires boot 4.26

Bugfix – GPS line segments crossing reference lap did not cross track at 90 degrees

Increase GPS line segments to 3 a second (from 2 a second)

Main Code 1.6.0

Requires boot 4.26

Add GPS coords to reference lap, use for more accurate timeSlip and predictedLapTimes

Uses regularly spaced GPS line segments that cross track so time to a set position on track can be accurately timed and compared with a reference lap

Resulting change in calibration structure necessitated new main code version 1.6.x

Main Code 1.5.0

Requires boot 4.26

* Calibration structure changes to support enhanced user access
* Option to disable Ethernet and Flash notifications on a page by page basis

Main Code 1.4.21

Requires boot 4.26

Add support for offloading internal flash logging/streaming data while logging enabled

* Act of initiating Ethernet download suspends logging which is re-instated after download complete or cancelled
* Act of inserting USB memory suspends logging which is re-instated after USB removed

Add support for “clear internal logging” Ethernet command

Add support for streaming logged data directly to PC via LifeData

Add option to disable page tabs

Main Code 1.4.20

Requires boot 4.23

LifeMon compatibility

Bugfix – Enable "Safe to eject USB" popup on DashLogging to USB

Bugfix - Prevent long keypress on OK causing "Safe to eject USB" when no USB or using MMC target

Bugfix - Prevent instances of USBTransferDialog NOT auto cancelling when USB removed

Add new math parser functions : Integral(val, reset) and Interpolate(val, x1,y1, x2,y2, ... )

Main Code 1.4.19

Requires boot 4.22

bugfix - stop navigational keys killing UsbTransferDialog and subsequent logging

Main Code 1.4.18

Requires boot 4.22

bugfix - page tabs on text3x3 and text3x4

new GPS beacons - El Pinar, Autopolis, San Juan, Okayama, Sugo, Everland

Main Code 1.4.17

Requires boot 4.22

Support for Ethernet download of internal flash logging

Main Code 1.4.16

Requires boot 4.21

Increase the maximum number of devices (groups of items) to 64 (from 20)

Add support for linearisation of CAN voltages - ONLY - 5V at 1mV/bit

Main Code 1.4.15

Requires boot 4.21

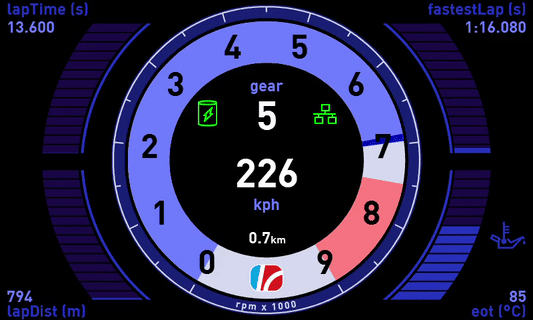
Disable page tabs when a page change is requested though the CHANGE\_PAGE math function

Main Code 1.4.14

Requires boot 4.21

PduX2 added to the named devices able to use the PDU16 page template

Page tabs now show the abbreviated name of current page and neighbouring pages while user manually navigating the screens on the dash – see top section of video below



Main Code 1.4.13

Requires boot 4.21

Add MMC logging logo, used in same position as USB logo

Consistent colour of logging logo (MMC or USB) reporting logging state

Main Code 1.4.12

Requires boot 4.20

First main code capable of logging directly to internal flash memory (MMC) rather than USB.

Can log independently or stream from an LR ECU to MMC or USB

USB\_LOGGING\_ENABLE MATH function applies to both MMC and USB logging

USB\_LOGGING\_ENABLE is no longer optional if MMC logging selected

Transfer from MMC to USB only occurs when logging disabled and USB detected

Contents of MMC logging listed in boot messages

Progress dialog for MMC to USB copy

MMC logged data durable and will survive unexpected power outrages with minimal loss of logged data

MMC logging area supports up to 124 individual files spanning up to 1GB of total memory.

BOOT CODE

Boot code 4.26

Required for Main 1.4.21

Adds auto LCD dimming to help dash “survive” periods of low power supply voltage

Boot code 4.23

Required for Main 1.4.20

Boot code 4.22

Required for Main 1.4.17+

Add support for Ethernet download of internal logging

Boot code 4.21

Required for Main 1.4.13 to 1.4.16

Updated file system library adds support for exFAT and long file names

Boot code 4.20

Required for Main 1.4.12

Initial boot version supporting Internal flash (MMC) logging

Appendix A – Supported Tracks in Dash GPS Database

|  |  |
| --- | --- |
| Adelaide | Australia |
| ADM Raceway | Russia |
| Adria | Italy |
| Alastro | Finland |
| Albacete | Spain |
| Albert Park | Australia |
| Aldo Scribante | South Africa |
| Algarve International | Portugal |
| Almeria | Spain |
| Anderstorp | Sweden |
| Anglesey | UK |
| Ar Reem Racetrack | Saudi Arabia |
| Ascari | Spain |
| Assen | Netherlands |
| Auto Club Speedway | USA |
| Autobahn | USA |
| Autodrom Most | Czech Republic |
| Autodromo de Rivera | Uraguay |
| Autodromo di Franciacorta | Italy |
| Automotodrom Brno | Czech Republic |
| Autopolis | Japan |
| Bahrain Inner | Bahrain |
| Bahrain Outer | Bahrain |
| Baku City | Azerbaijan |
| Bangsaen | Thailand |
| Barbagallo Raceway | Australia |
| Barber Motorsports Park | USA |
| Barcelona-Catalunya | Spain |
| Bedford Autodrome East | UK |
| Bedford Autodrome North | UK |
| Bedford Autodrome South | UK |
| Bedford Autodrome West | UK |
| Belle Isle | USA |
| Bilster Berg | Germany |
| Blyton Park | UK |
| Boxberg | Germany |
| Brands Hatch | UK |
| Buddh International | India |
| Buenos Aires | Argentina |
| BuriRam United International | Thailand |
| Bushy Park International | Barbados |
| Bushy Park National | Barbados |
| Cadwell Park | UK |
| Calabogie | Canada |
| Campo Grande | Brazil |
| Carolina Motorsports Park | USA |
| Cascavel | Brazil |
| Castle Combe | UK |
| Chengdu International | China |
| Cicuito Guadix | Spain |
| Circuit of the Americas | USA |
| Circuito da Guia | Macau |
| Cremona | Italy |
| Cristais | Brazil |
| Croft | UK |
| Curitiba | Brazil |
| Daytona | USA |
| Dezzi Raceway | South Africa |
| Dijon-Prenois | France |
| Donington Park | UK |
| Drive Center | Sweden |
| Dubai | United Arab Emirates |
| East London | South Africa |
| El Pinar | Uruguay |
| El Villicum | Argentina |
| Estoril | Portugal |
| Everland | South Korea |
| Falkenbergs Motorklubb | Sweden |
| Fort Grozny | Russia |
| Fuji | Japan |
| Goiania | Brazil |
| Goodwood | UK |
| Grand Prix of St Petersburg | USA |
| Guangdong | China |
| Harris Hill | USA |
| Hermanos Rodriguez | Mexico |
| Hidden Valley | Australia |
| Hockenheimring | Germany |
| Homestead-Miami | USA |
| Hungaroring | Hungary |
| Igora Drive | Russia |
| Imola | Italy |
| Indianapolis Motor Speedway | USA |
| Inje Speedium | Korea |
| Intercity Istanbul Park | Turkey |
| Interlagos | Brazil |
| Interlomas | Chile |
| Jarama | Spain |
| Jerez | Spain |
| Jiangsu Wantrack | China |
| Jyllands-ringen | Denmark |
| Karlskoga | Sweden |
| Kazan Ring | Russia |
| Killarney | South Africa |
| Knockhill | UK |
| Korea International | Korea |
| Kyalami Race Track | South Africa |
| Laguna Seca | USA |
| Lausitzring | Germany |
| Lightning | USA |
| Lime Rock | USA |
| Londrina | Brazil |
| Long Beach | USA |
| Losail International | Qatar |
| Magny Cours | France |
| Malla Park | Australia |
| Mantorp Park | Sweden |
| Marina Bay | Singapore |
| Mid-Ohio | USA |
| Misano World | Italy |
| Monaco | Monaco |
| Monticello | USA |
| Montreal | Canada |
| Mont-Tremblant | Canada |
| Monza | Italy |
| Moscow | Russia |
| Mosport | Canada |
| Motorland Aragon | Spain |
| Motorsport Ranch | USA |
| Mount Panorama | Australia |
| MSR Houston | USA |
| Mugello | Italy |
| Navarra | Spain |
| NCCAR | USA |
| Ningbo | China |
| Nizhniy Novgorod | Russia |
| NOLA Motorsports Park | USA |
| Nurburgring | Germany |
| Okayama | Japan |
| Ordos International | China |
| Oschersleben | Germany |
| Oulton Park | UK |
| Palm Beach | USA |
| Palmer Motorsports Park | USA |
| Papenburg | Germany |
| Paul Ricard | France |
| Pau-Ville | France |
| Pembrey | UK |
| Phakisa Freeway | South Africa |
| Phillip Island | Australia |
| Pittsburgh International | USA |
| Portland International | USA |
| Queensland Raceway | Australia |
| Red Bull Ring Spielburg | Austria |
| Red Star Raceway | South Africa |
| Ring Knutstorp | Sweden |
| Road America | USA |
| Road Atlanta | USA |
| Rockingham | UK |
| Roebling Road | USA |
| Rudskogen | Norway |
| Rustavi | Georgia |
| Sachsenring | Germany |
| Salzburgring | Austria |
| San Juan | Argentina |
| Sandown Raceway | Australia |
| Santa Cruz do Sul | Brazil |
| Sarthe | France |
| Sebring International | USA |
| Sepang International | Malaysia |
| Shanghai Audi International | China |
| Shannonville | Canada |
| Silverstone International | UK |
| Silverstone National | UK |
| Slovakiaring | Slovakia |
| Smolensk Ring | Russia |
| Snetterton | UK |
| Sochi | Russia |
| Sonoma | USA |
| Spa | Belgium |
| Spring Mountain East | USA |
| Spring Mountain North | USA |
| Spring Mountain South | USA |
| Spring Mountain West | USA |
| Sugo | Japan |
| Summit Point | USA |
| Suzuka | Japan |
| Sydney Motorsport Park | Australia |
| Symmons Plains | Australia |
| Taruma | Brazil |
| Tazio Nuvolari | Italy |
| Termas De Rio Hondo | Argentina |
| The Ridge | USA |
| Thermal Desert | USA |
| Thermal North | USA |
| Thermal South | USA |
| Thompson Speedway | USA |
| Thruxton | UK |
| Thunderbolt | USA |
| Thunderhill Raceway | USA |
| Toronto Motorsports park | Canada |
| Twin Ring Motegi | Japan |
| Utah Motorsports Campus East | USA |
| Utah Motorsports Campus West | USA |
| Val de Vienne | France |
| Valencia | Spain |
| Vallelunga | Italy |
| Velo Citta | Brazil |
| Velopark | Brasil |
| Vila Real | Portugal |
| Virginia International | USA |
| Wakefield Park | Australia |
| Watkins Glen | USA |
| Willow Springs | USA |
| Yas Marina | United Arab Emirates |
| Zandvoort | Netherlands |
| Zhejiang | China |
| Zhuhai | China |
| Zhuzhou | China |
| Zolder | Belgium |
| Zwartkops | South Africa |