LifeData User Manual

Document Date: 2015-08-12

Author: M.H
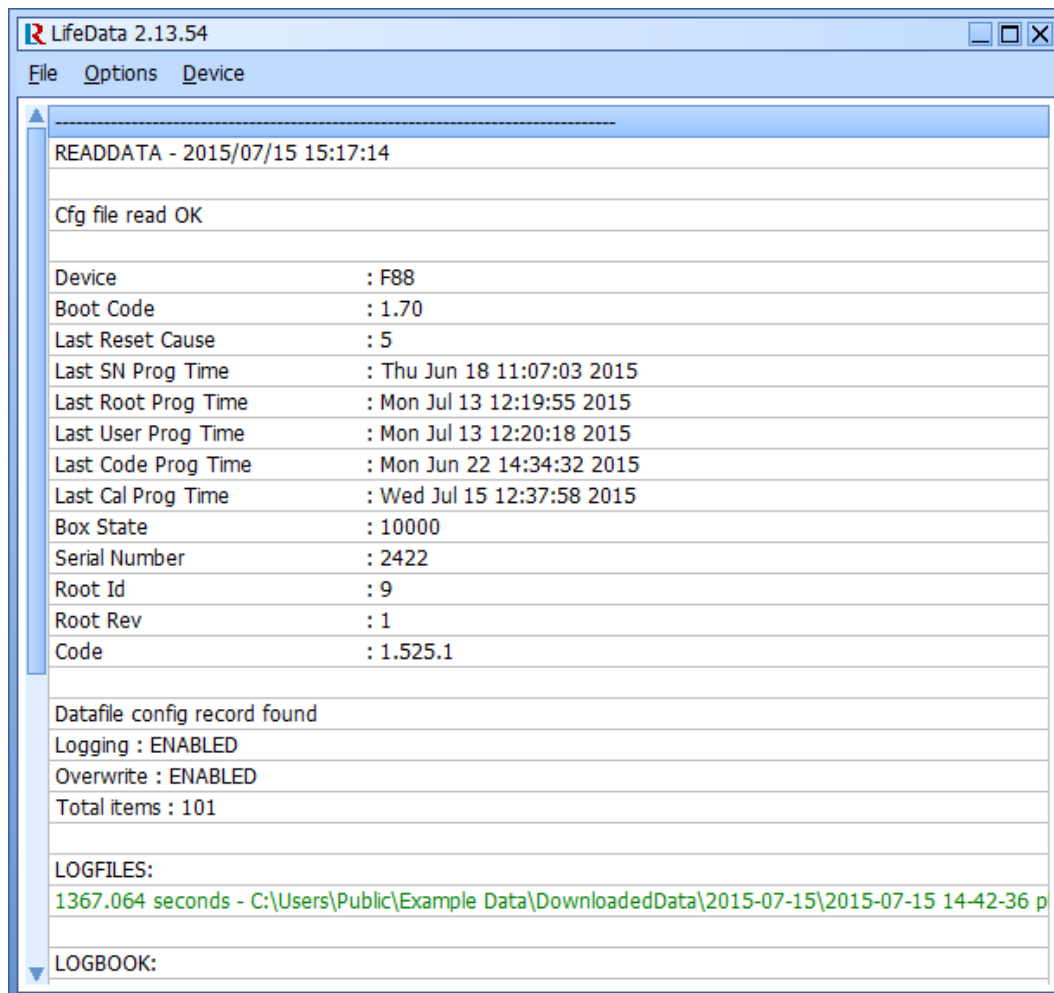
Contents

1 Introduction

LifeData is used to extract logged files from Life Racing devices.

Life Racing applications are intended for quick operation without the use of a mouse for improved usability in the pit lane. All menu buttons can therefore be reached using keyboard shortcuts. Each option has an underlined letter, identifying its shortcut key or the shortcut displayed to the left. Dialogue boxes can be navigated with the arrow keys. The <Spacebar> can be used to select while <Enter> and <Esc> are used as OK and CANCEL respectively.

2 Download Data

2.1 Log screen

The LifeData log screen shows ECU and download information including:

- Date and time of download
- Cfg file read status
- Device info: software levels and programme dates
- Data info
- Data save locations
- Error info (optional)

Save the entire log by selecting *File, save logged Output.* This will store a text file in the main working directory. Clear the log screen with *Options, Clear log.*
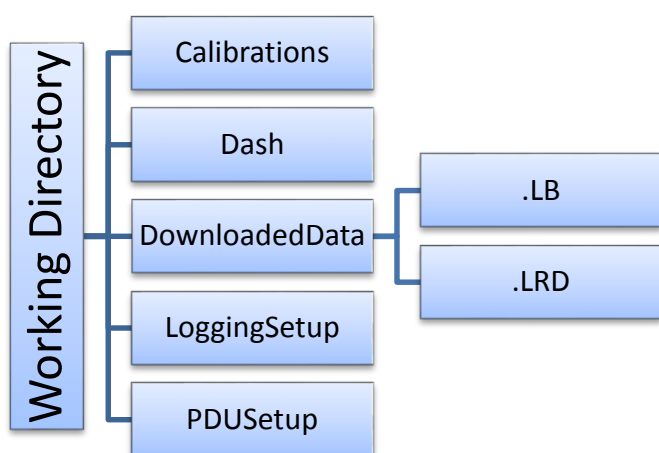
2.2 Working Directory

The working directory is maintained across all Life Racing applications and can be edited in LifeCal, LifeCfg, LifeData, LifeView and PduSetup. To change the current working directory select *Working directory* under *File*. Use *CREATE* to create a new folder in the current location. Use *SELECT* to select the current location as the new working directory. If the location has not been used before, a .CFG file will be created. Selecting *Working Dir Behaviour* allows editing of the .CFG file.
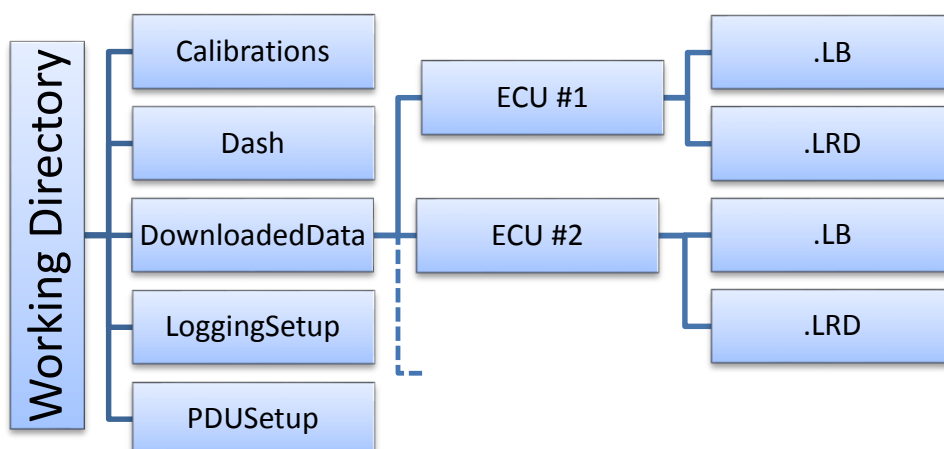
Devices that have been previously connected to are automatically added to the known devices list. They can also be manually added or imported from another working directory with the appropriate buttons. The ECU name will be used as a folder name if device directory is used. The suffix is included in file names.

Directories can be altered individually for calibrations, downloaded data and logging setup files. Tick use directory per device to separate files by ECU. Tick Use directory per session to use either the Date sub directory or a custom sub directory. A Date sub directory will automatically update and add folders when new data is downloaded.

Downloaded Data
☐ Use directory per device
☐ Use directory per session

Working Directory
- Calibrations
- Dash
- DownloadedData
  - .LB
  - .LRD
- LoggingSetup
- PDUSetup

Downloaded Data
☒ Use directory per device
☐ Use directory per session

Working Directory
- Calibrations
- Dash
- DownloadedData
  - ECU #1
    - .LB
    - .LRD
  - ECU #2
    - .LB
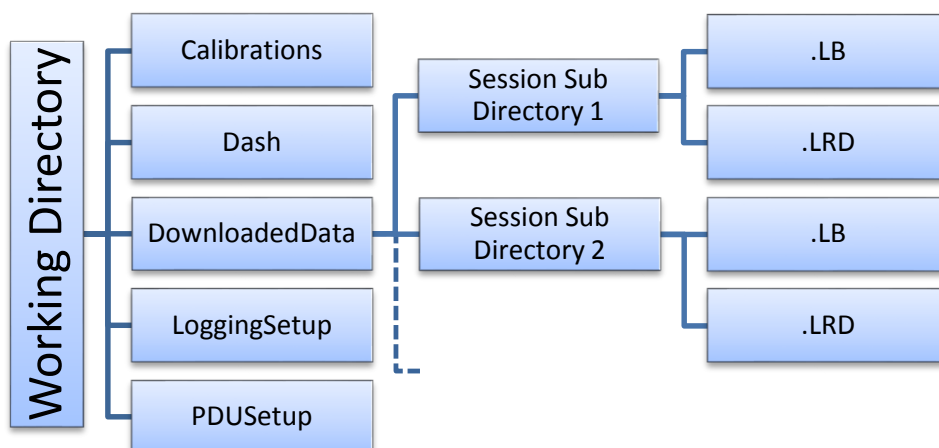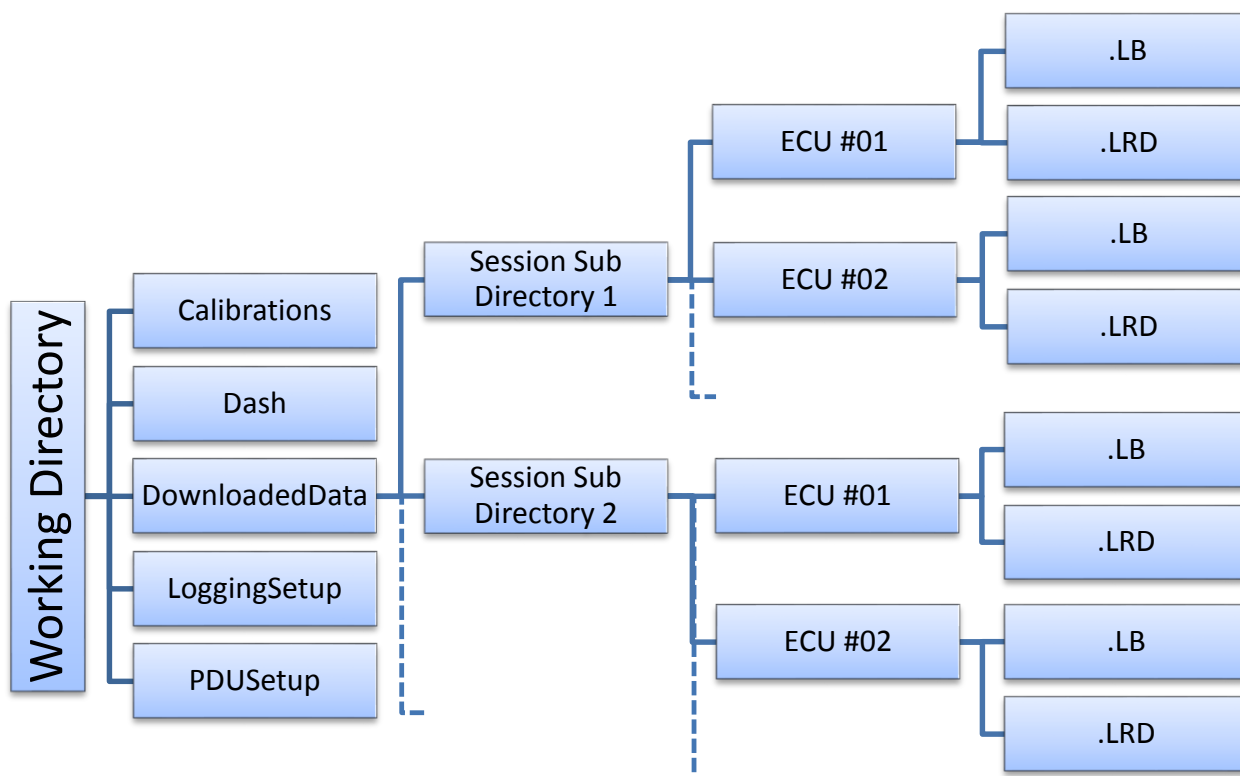   - .LRD
- LoggingSetup
- PDUSetup

Downloaded Data
☐ Use directory per device
☒ Use directory per session

Downloaded Data
☒ Use directory per device
☒ Use directory per session

2.3 Comments

LRD files can have comments added before download or during the read process. Pre-set the comments before reading with *Device, set LRD file Comment.* This will be remembered for all subsequent downloads until edited or the programme is closed.

Logbook files cannot be edited during or after a download. The logbook comment must be set whilst it remains in the ECU. To do this, select *Device, Logbook Comment.* The user and root comments are separated and may display differently if at all depending on security settings.

2.4 Read

To download data from a connected device select *Device, Read data.* LifeData will then search for and connect to a device, and give download options.

For efficient management LifeData only downloads files that do not exist in the working directory by default. However, if a different working directory is used, LifeData will read the entire contents of the ECU (this may time some time). To avoid this situation, a date limit can be applied to ignore any old data.

Selecting QuickView will allow you to view the most recent data as quick as possible. Specify a download time (real time not data time i.e. 5 seconds of downloading is probably the last few laps of actual track running) and once this time expires the data is automatically opened in LifeView and presented using your default worksheet for quick analysis while the software continues to download the full data in the background. These quick view files are stored in a sub directory called "QV". Any interruption to the download process is automatically stored in a sub directory called "PARTIAL" which can also be open and viewed.
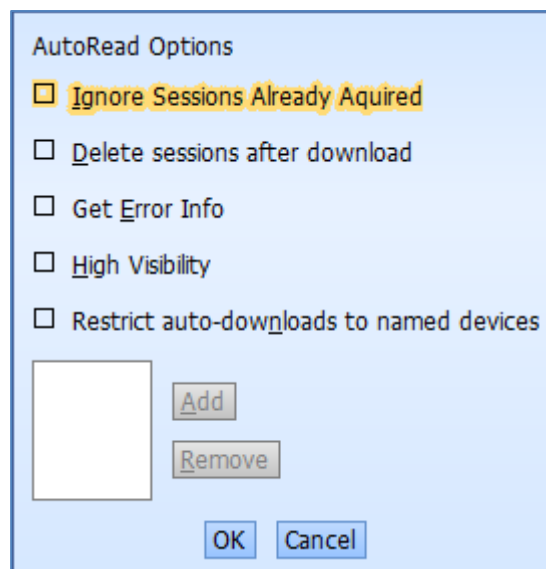
Enable suffix to add a run number suffix to file name. This will come after the working directory suffix. Set Run Number to select the initial number used. The number is then automatically updated for each file.

Enable Calibration-Programming to programme a calibration to the ECU immediately after download. This saves time by allowing the two operations to happen with a single command. The files will be downloaded to the working directory and the log screen will be updated.

2.5 AutoRead

AutoRead is designed to minimise the amount of time a connection is required. Selecting *Device, AutoRead* will bring up the same dialogue as an ordinary read but without a connection being required. The settings can then be set before a device is connected. Once AutoRead is active, LifeData will begin searching for a device. As soon as one is connected, the data will be downloaded to the working directory and any additional operations completed.
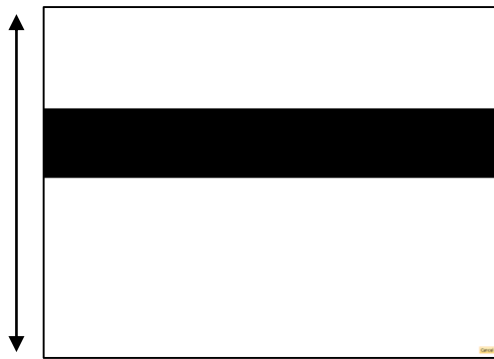Additional AutoRead options can be found under *Options, AutoRead.*

Enable *Ignore Sessions Already Aquired* to not download any files with matching names in the working directory. This also effects normal reading.

Enable *Delete sessions after download* to automatically delete downloaded files from the ECU memory. A normal read will ask after every download.

Enable *Get Error Info* to display errors in the log display. Useful for finding sensor failures. This also effects normal reading.

Enable *High Visibility* for full screen status display when AutoRead is active.
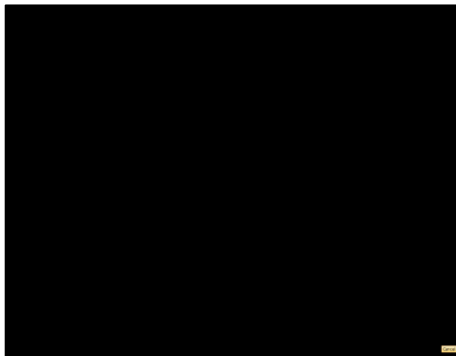
Sweeping bar = searching

Expanding/Contracting Bar = decoding/downloading

Flashing screen = complete

Enable *Restrict auto-downloads to named devices* to only automatically download from the devices listed. Any other device will be ignored and require a manual read.

2.6 Stream

If an ECU is staying connected to a PC, the logging can utilise the PC's internal memory by streaming data. This will allow much larger files to be created than with the ECU memory. To begin streaming, select *Device, read Streamed data*.

3 Other Options

3.1 Decode .LRS

LRS files from USB datalogging must be decoded into .LRDs before they are viewable. To do this, select *File, decode Streamed data* and locate the .LRS file. Alternatively, decode an entire folder with *decode Streamed data folder.* The new files will be located in the working directory.

3.2 Quick View

Downloaded files must be viewed in LifeView, however LifeData gives the option of loading these directly from its file menu. Select *File, Load in LifeView* to select a file or files that will then be opened in LifeView. The latest file can be opened without having to locate it *with Load latest Data in LifeView*.

3.3 Global Options

Global Options can be found by selecting *File, Global Options*.

Black-on-White colour scheme
Toggle the colour scheme of all Life Racing applications between a white background and a black background. The best option will be dependent on screen quality, ambient lighting and user preference.

Colour Blind (yellow/green)
Changes fixed yellows to purple to aid with yellow/green confusion.

Reverse Folder Order (in file menu)
Folders are ordered alphabetically in the file menu. Tick this box to reverse this order.

Floating Mouse Focus (in dialogs)
Causes whatever the mouse pointer is hovering over to be highlighted as if it was selected with the keyboard.

4 Document Revision History

2015-08-12 – MH   V1.0 – Initial public release