

Technical information

RecRead for Android (V0.02)

Quick reference guide

The RecRead for Android application enables a phone or tablet running Android to read consumption, speed and distance data sent by an AIC DL4045 Light logger and generates «CSV» files. Once the logging operation is stopped, the file is available and can be sent over a GPRS or WIFI network.

888
Instruktor

900
Veritas

1000

4000
Veritas

5000
Fuel flow
Master

6000
Swissline

FS

Board
Computer
+
Totalizer

Data
Logger
and
Software

Consumption	Speed	Status	Device
135.3 L/h	170.4 km/h	Now Recording	DL4045 Light/V0.00
79.41 L/100km		Lines 15	Link Qual. 100%

	Evt [#]	Cons [L]	Dist [km]	Avg [l/100km]	Duration [HH:MM:SS]	Round [#]
Next to last	3	0.244	0.282	86.19	00:00:05	14
Last	3	0.204	0.311	65.85	00:00:05	15
Current	3	0.150	0.187	79.85	00:00:03	16
Total		1.443	1.844	78.25	00:00:30	

TRIG LOGGING PAUSE

The RecRead for Android software operates in association with the AIC **DL4045 Light data logger** (sold separately). This device offers a quick and easy way to acquire fuel consumption and distance travelled. The integrated Bluetooth connectivity allows a communication range of up to 100 m (in direct view) with an Android smartphone or tablet equipped with the RecRead for Android software.



AIC DL 4045 Light data logger

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SETTABLE PARAMETERS

To access the setting mode the device must be disconnected from the DL4045 Light.

PARAMETER	DESCRIPTION
LOGGING FUNCTION	To set up the various logging options.
Trigger mode	Time, manual or both.
Time interval	From one to 10'000 seconds.
Distance and speed display	<i>Shall there be no distance and speed data sensor input, it is possible to turn off their displaying..</i>
Vibration	This is a useful function to indicate that the logging function is on and continues when using other phone application. For example when having a phone call while logging. The vibration will show that the logging is working.
EVENTS FUNCTION	6 settable events are available to be uses as ear marks during a test. Example: Refiling, traffic backup, dirt road, lunch break, etc...
SENSORS	To set up the sensors variables.
AIC Flow sensor	Set the pulses per liter value.
Distance sensor	Set the distance sensor pulses for distance and speed information.
UNITS	<i>Choice between metric and US units.</i>
Metric of US	<i>Choose the unit system. Metric (Km and liters) or US (miles and US gallons).</i>
Consumption display mode	<i>Choose between L /100 Km and Gallons/100 Miles or Km / liters and MPG.</i>
FAVORITES	To set up the communications parameters.
Connection with DL4045 Light	Manually or automatic with favorite AIC data logger.
Favorite AIC data logger	Set up the AIC data logger for default automatic Bluetooth connection.
Email	Give the email to which you need the csv file to be sent. Multiple email entry possible. Addresses to be separated with a semicolon sign.
PERSONALISTION	Possibility to label the application with a unique name. Company, department, driver, etc.





DISPLAYED DATA - TOP SECTION OF THE SCREEN

<i>DATA LABELLING</i>	<i>DESCRIPTION</i>
CONSUMPTION (Left side)	
Current consumption	Unit depends on setting. L / h, G / h.
Average consumption	Unit depends on setting. L / 100 Km, MPG, Km / L or G / Miles.
SPEED (Middle left side)	Unit will depends on setting. Km or Miles (US).
STATUS (Middle right side)	
Now	Shows the logging status. <ol style="list-style-type: none">1. Connected (Bluetooth connection established—yellow highlighted)2. Recording (flash red and yellow).3. Paused.
Lines	Gives the total of lines recorded.
DEVICE (Right end side)	
Type / Version	Type and version of the device used for collecting the data.
Link quality	Indication of the Bluetooth link quality (Signal strength).

DISPLAYED DATA - MIDDLE SECTION OF THE SCREEN

<i>DATA LABELLING</i>	<i>DESCRIPTION</i>
Event	Event reference number under which the lines have been recorded
Con. (<i>Consumption</i>)	Total consumption for each recorded line.
Dist. (<i>Distance</i>)	Total distance travelled for each recorded line.
Avg. (<i>Average</i>)	Average consumption for each recorded line.
Duration	Time lapsed for each recorded line.
Round	Numbers of lines recorded or numbers of rounds driven when test carried on closed loop or track.
Total	Total for each column
Current	Current line or round in progress
Last	Last line recorded
Next to last	Line recorded before the last one.

BUTTON FUNCTION

BUTTON		DESCRIPTION
Menu (Top right side of screen)		Access to Bluetooth disconnection of quit application function. To access the parameters setting menu, the Bluetooth must be disconnected. To quit the application the Bluetooth must be disconnected.
Parameters setting (Top right of the screen)		Gives access to the parameters settings. Icons appears only once the Bluetooth connection has ended.
File sending (Top right of the screen)		Link to the email application for sending the file. The csv. files are stored in the "download" directory of your device.
Log (bottom right of screen)		Start the logging.
Stop (bottom left of screen)		Stop the logging to create the cvs. file. Once the logging is stopped the menu button appears again.
Event marker (Pencil) (Pencil)		Use to label the recorded data with one of the 6 pre set event
Trig Logging		Use to trigger a manual logging. Button appears when manual trigger is selected in the parameters menu
Pause (bottom right of screen)		Appears once the logging has started.

CSV File - Column header description

The data files generated by RecRead for Android are text files in which the data are organised in lines and columns. Each line of the table contains the data relative to one logging instant and each column contains one type of data. The columns are separated by semicolons (“;”). The extension of the RecRead2 data files is “.CSV” (Comma Separated Values).

The “.CSV” extension is automatically recognized by Excel as a known data format. If you have Excel installed on your computer a double click on a .CSV file opens the file and its content is displayed in Excel like a regular spreadsheet. On old versions of Excel, you may have to use the importation tool. Once opened in Excel, the file can then be saved as an Excel spread sheet (.XLS or .XLSX).

Line	Date	Time	DiffConsumption	DiffDistance	DiffEfficiency	DiffTime	TotalConsumption	TotalDistance	Efficiency	TotalTime	EventCode	EventLabel
[#]		[HH:MM:SS]	[L]	[Km]	[L/100Km]	[HH:MM:SS]	[L]	[Km]	[L/100Km]	[HH:MM:SS]	[#]	[<Label>]
1	14.01.2016	14:42:52	0.135	0.1469	91.871	00:00:05	0.135	0.147	91.871	00:00:05	0	No Event
2	14.01.2016	14:42:57	0.1485	0.1328	111.841	00:00:05	0.284	0.28	101.351	00:00:10	0	No Event
3	14.01.2016	14:43:02	0.133	0.1467	90.682	00:00:05	0.416	0.426	97.681	00:00:15	0	No Event
4	14.01.2016	14:43:07	0.1485	0.1328	111.841	00:00:05	0.565	0.559	101.043	00:00:20	0	No Event
5	14.01.2016	14:43:12	0.134	0.1469	91.191	00:00:05	0.699	0.706	98.993	00:00:25	0	No Event
6	14.01.2016	14:43:17	0.135	0.1325	101.887	00:00:05	0.834	0.839	99.45	00:00:30	0	No Event
7	14.01.2016	14:43:22	0.147	0.1328	110.711	00:00:05	0.981	0.971	100.989	00:00:35	0	No Event
8	14.01.2016	14:43:27	0.134	0.1331	100.71	00:00:05	1.115	1.104	100.956	00:00:40	0	No Event
9	14.01.2016	14:43:32	0.148	0.1339	110.539	00:00:05	1.263	1.238	101.992	00:00:45	2	Accident
10	14.01.2016	14:43:37	0.1335	0.1597	83.583	00:00:05	1.396	1.398	99.889	00:00:50	2	Accident
11	14.01.2016	14:43:42	0.148	0.1325	111.698	00:00:05	1.544	1.531	100.911	00:00:55	2	Accident
12	14.01.2016	14:43:47	0.1335	0.1467	91.023	00:00:05	1.678	1.677	100.046	00:01:00	2	Accident
13	14.01.2016	14:43:52	0.148	0.1325	111.698	00:00:05	1.826	1.81	100.899	00:01:05	2	Accident

Column Header (Left to right)

DESCRIPTION

Line	Number of the line recorded
Date	Current date as set in the Android device used.
Time	Time of the recording as set in the Android device used. Hours: Minutes: Seconds.
Diff Consumption	Consumption between two recording trigger periods.
Diff Distance	Distance travelled between two recording trigger periods.
Diff Efficiency	Efficiency achieved between two recording trigger periods.
Diff Time	Time elapsed between two recording trigger periods.
Total consumption	Total consumption. The total consumption value in this columns IS the REFERENCE value. The values in the “Diff” columns are calculated off this total column.
Total distance	Total distance. The distance value in this columns IS the REFERENCE value. The values in the “Diff” columns are calculated off this total column.
Efficiency	Efficiency calculated off the Total consumption and Total distance columns
Total Time	Time elapsed since the start of the logging
Event code	Each event set in the parameters has an event code which appears here. The “0” represents NO event.
Event Label	Description of the event as set in the parameters.

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