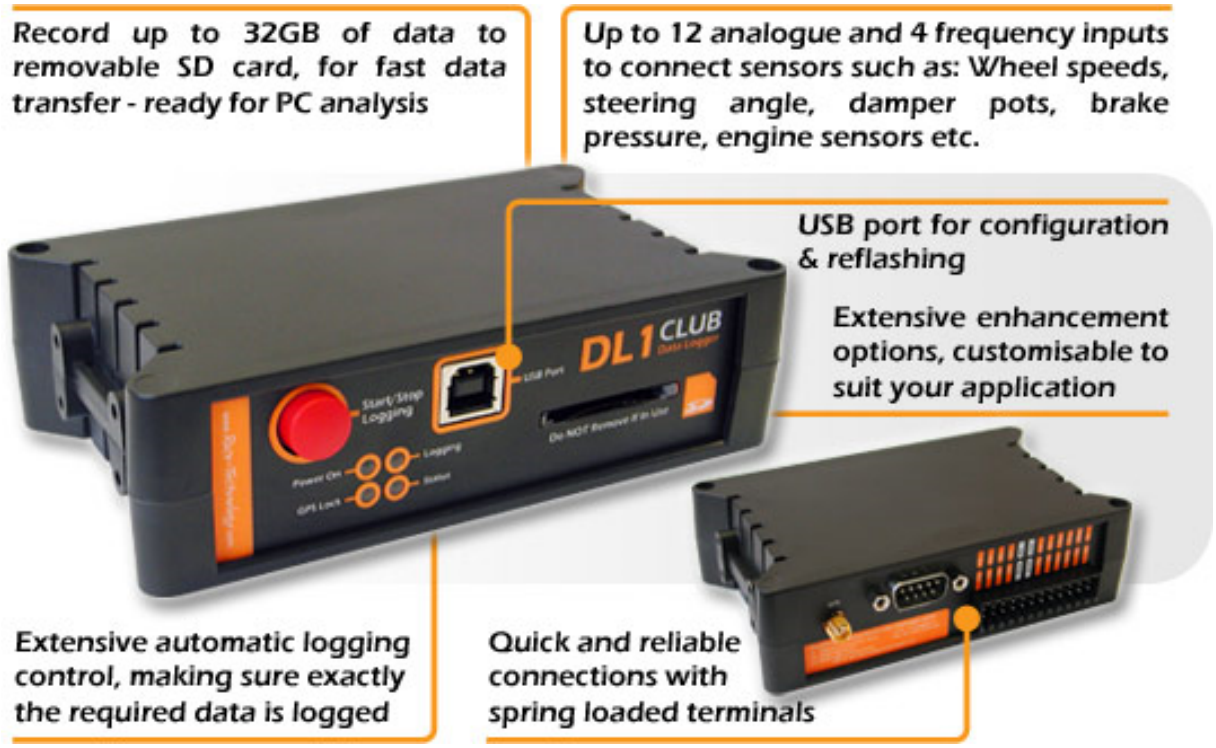
DL1 CLUB - Highly adaptable with a range of enhancement options, and powerful live processing allows live timeslip calculations to be displayed on a DASH



The DL1 CLUB, a highly expandable data logger, with a huge range of enhancement options and powerful live data processing.

With a basic set up the DL1 CLUB can be easy to set up and use - with a simple start/stop button, USB configuration and spring loaded connectors. However the depth of features and expandability of the unit will allow the data logger to meet your needs as your knowledge and expectations grow.

The DL1 CLUB is the next step up from the DL1 SPORT, the unit additionally features 4 frequency inputs, powerful live processing, and a broader range of enhancement options.

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Race Technology
Automotive Technical Excellence

Why choose a DL1 CLUB data logger?

What our GPS data loggers do is more than just collect the data, they allow all the data to be referenced to not just time, but a position on the track. This allows you to interpret the data in a meaningful and understandable way, referenced clearly to the real world: Pick a corner and see how you braked, how much grip you used and where, then how you exited. Compare what you did on your fastest time through the sector and learn where you can go faster.

- Powerful onboard processing - perform calculations live. The results can be viewed live (on a display or recorded to video using a VIDEO4), not just in post analysis:
- Timeslip can be calculated live and displayed directly to the driver, showing exactly how much faster or slower you are continuously - not just at lap and sector markers.
- Sensor data is processed directly by the unit rather than having to be processed in the dashboard, VIDEO4 unit and Analysis software separately.
- User defined channels used to perform maths functions on the live data, e.g. combine 4 wheel speed sensors to show if the average speed of the front wheels is higher than the rear wheels, showing spin and braking lockup. This can be displayed live to the driver, overlaid onto a video, or logged for analysis.
- Review your braking points and grip usage with the built in 2g 3-axis accelerometer (optional 6g enhancement available for high downforce applications).
- Capable of detecting minute changes with 100Hz update rate on all sensor and accelerometer channels.
- Lap and sector timing, in the software, or live with a DASH2, DASH3, or DASH4 PRO display.
- Unrivalled accuracy with our 20Hz GPS option (5Hz standard).
- Measure your drift angle with the gyro option.
- Extensive automatic logging control, making sure exactly the required data is logged.
- Get the most out of your engine by logging information from your ECU or vehicle's CAN data stream.
- Optional GoPro control + video licence, for synchronised HD video and DL1 data.

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Configure the unit over USB with the user friendly configuration software

DL1 CLUB - What's in the box?

A complete DL1 CLUB data logging system, ready to use. Includes:

- DL1 CLUB unit
- 2GB SD memory card
- Magnetic mounting GPS antenna (3m cable)
- 1 pair of stainless steel mounting brackets
- 4 velcro strips
- 12v power lead (with connector block)
- USB lead
- Comprehensive software CD
- Carrying case (with cut foam interior)
- DL1 Quick Start Guide

The only thing you will need to add is a suitable card reader for your PC, to download and analyse data.

Recommended Compatible Products:

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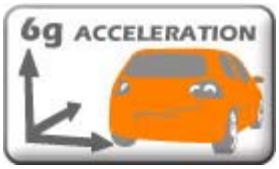
DL1 CLUB - Enhancement options:

20Hz GPS

Increased speed and position accuracy, with higher GPS resolution. Download corrections from the internet with advanced PPP mode.

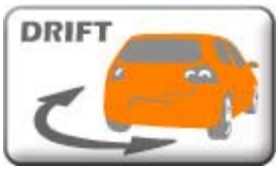
The 20Hz GPS option for the DL1 is quite simply the best and most accurate available of any competitor data logging system. The GPS makes a unique calculation of position and speed 20 times a second with no interpolation or other "tricks".

The unique GPS technology has been developed in house by our engineers and tested in the most challenging racing environments - the accuracy is nothing short of a break though at this price point and in this respect there really isn't any competition.



6g Accelerometers

6g accelerometers are recommended for applications that use large aerodynamic aids.



Gyro Option

The drift option uses a built in gyro for measuring vehicle drift (yaw).

GoPro HD Video Synchronisation

Synchronised DL1 data with HD video using the GoPro control option. Included software licence enables HD video by data analysis, and data overlaid video exports from the Analysis software. Control the GoPro using the control cable (compatible with hero, hero 2 and hero 3 white).

*GoPro camera not included.

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Low Side Drivers and 4 Extra Analogue Channels

Low side output drivers and 4 extra analogue inputs is the option you will require if you want to switch on/off external systems automatically using your DL1. This control can be simple or based on a complicated custom equation between various channel data. This option also enables the 4 additional analogue channels, making a total of 12.

High Accuracy Export

If you intend to use your data in an external application (not just the analysis software) you will need an export licence to output the 20Hz data at full accuracy. The licence enables increased output resolution on GPS latitude, longitude, raw velocity, position, heading, gradient, speed and distance.

2nd Serial Port

A second serial port is ideal for combining multiple input and output modules for complex systems, or driving a low speed telemetry channel on one port and a high speed output for video overlay on the second. A breakout cable is supplied with this option to enable easy connection of the separate serial ports.

PWM Output Controller + Advanced Frequency Input

The PWM (Pulse Width Modulation) output controller allows the unit to control an external system with a graduated signal. Meaning it can be "on" anywhere between 1 and 100%. This is ideal for water injection systems etc. This option also enables the advanced frequency inputs, enabling: Pulse counting, pulse high time, pulse low time, pulse position, duty cycle and mark space ratio.

CAN Communication

CAN reception (15 channel license):

With this option the unit can decode any CAN data from either the vehicles main CAN stream or CAN based aftermarket ECU. This data can be mapped to any RT channels for saving or sending to serial port. Up to 105 CAN receive channels per unit, in multiples of 15 (one £100 licence gets you 15 channels). Messages loadable using .dbc files. Data rates of up to 1Mbit and 11 or 29 bit addressing. A breakout cable is supplied with this option to enable easy connection to the CAN ports.

CAN transmission:

With this option the unit can transmit any of the internal data channels on the CAN bus at a rate determined by the configuration. A .DBC file is provided with the default channel data and decoding information to make use with third party CAN reception systems much easier. Data for transmission on the CAN bus could be from the internal sensors (GPS, accelerometer, gyro, analogue channels, etc.) or from the serial input from an ECU interface or other unit attached to the serial port. The transmission rate for each channel can be individually configured at rates of up to 100Hz. Transmission can use 29bit or 11bit addressing at a number of different baud rates.

CAN transmit and receive can both be specified on the same port. Each port must run at the same baud rate, if separate rates are required we advise using the second CAN port for this.

Configuration Lock

The DL1 CLUB and DL1 PRO are extensively used as scrutineering loggers, monitoring vehicles in race series to prevent any foul play and to enforce the rules of the series. In these applications it is often preferable to lock the configuration on the units to prevent any of the settings and configuration from being read or changed by unauthorised individuals. Locking and unlocking the units is possible but only by the authorised person with the "Keys".