PARAY

Contrôle ton sport!

BDL

BIKE DATA LOGGER

QUICK START GUIDE

V.01

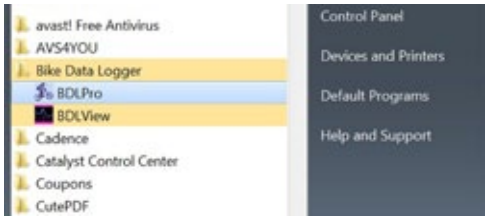
1.0 Install the BDL software suite on your computer (BDLPro, BDLView).

2.0 Charge the BDL Module internal battery.

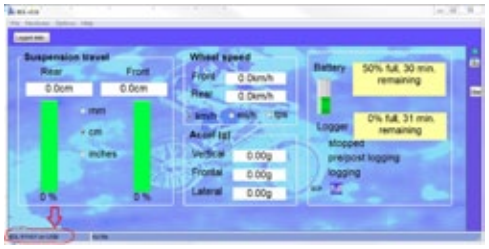
3.0 Connect battery power to the BDL Module. When the unit is powered, the red pilot lamp flashes.

4.0 Connect the USB adapter to the PC USB port and to the BDL Module.

5.0 Start BDLPro.



6.0 Verify that BDLPro communicates with the BDL Module (watch for blinking green square up right).



7.0 Now you must configure and calibrate the BDL module.

7.1 Click on Hardware/Configure... Then select the "Suspension/Wheels" tab. Set the parameters according to your bike configuration:

7.1.1 Set the wheels diameters.

7.1.2 Set the number of teeth the wheel speed sensor will see for each turn.

7.1.3 Set the total travel for the front suspension. Ensure the fork is fully extended and set the zero of the front suspension travel sensor by clicking on button "Record as value at full extension".

7.1.4 Set the total travel for the rear suspension. Ensure the rear shock is fully extended and set the zero of the rear suspension travel sensor by clicking on button "Record as value at full extension".

7.1.5 Set the total travel for the rear suspension

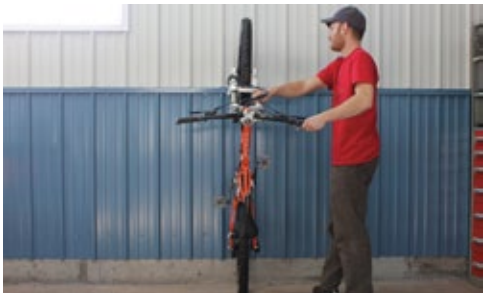
7.1.6 Open the g force sensors calibration section by clicking on the "g sensors" tab.

Place the bike in each of the 6 positions and at each position click on the correct image to set the sensor.

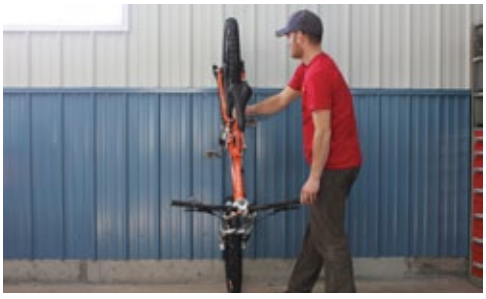
1-Normal Stand up position

2-Upside down position

3-Head up position

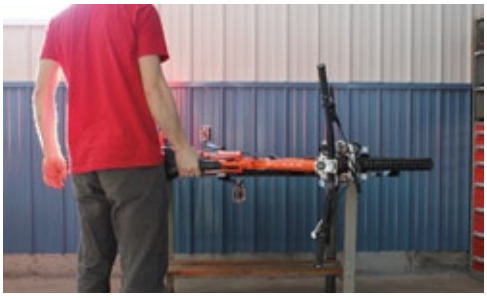


4-Head down position



5-Left side position

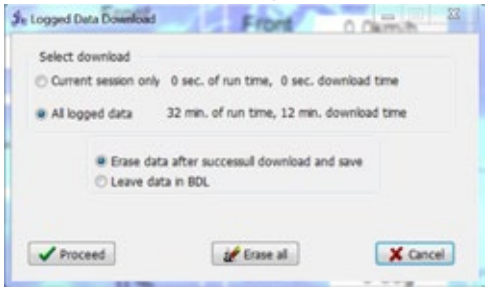
6-Right side position



7.1.8 Click "OK", this will return you to the main window. Check that all sensors work properly

- Compress the fork and check that the readings match the degree of compression in the Front suspension travel display.
- Compress the rear shock and check that the readings match the degree of compression in the Rear suspension travel display.
- Spin the front and the rear wheels and check that the speed readings on the BDLPro main window corresponds approximately to the actual wheel speed.
- Also on the main window you can see the battery state of charge and the logging state.

7.2 Now you have to configure the data logging mode. Click on "Hardware/Configuration…" menu item

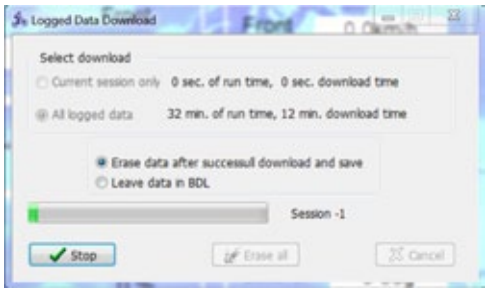


- Auto start/stop logging: if you select the "auto start/stop logging" the BDL module will auto start logging when one of the wheels spin and it will auto stop when both wheels stop for the amount of time you have set on the "stop logging after ___ minutes of not moving"
- No Auto start/stop logging: Each time you connect the power to the BDL module you will start to log a new run. Logging will begin immediately when you connect the power and stop only when you remove the power.
- You can select two different data rates for the data logging:
  - 50 Hz (50 samples per second) you will have 1 hour of logging capability
  - 100 Hz (100 samples per second) you will have 30 minutes of logging capability

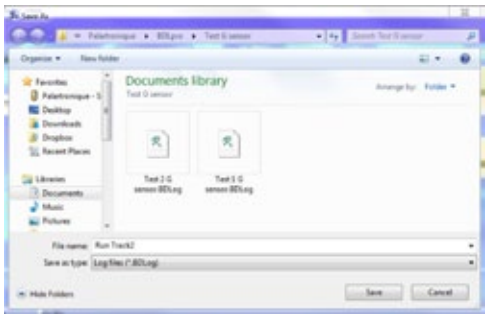
8.0 How to load and save DATA:

- On the main screen click on the "Logged data…" button

- Current session only: You will only download the last run saved.
- All logged data: You will download all the logged data
- Erase data after successful download and save: You will erase all the data in the BDL module after you download it
- Leave data on the BDL: you will leave keep all the data inside the BDL module after you download it.
- You can also click on the "Erase all" button to erase all the data in the BDL module without downloading it
- Save DATA:
  - When you click on the "proceed" button you will start the download.



- When the download finishes a "save as" window pops up.



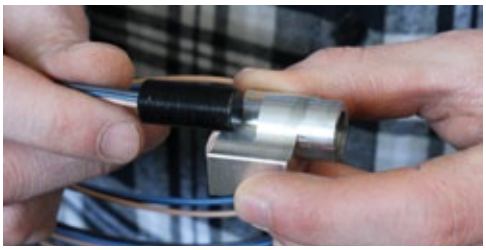
- After you choose a folder and write a file name, click on "Save". Your data is then saved to a file and the BDLView program will automatically start with that file loaded in.

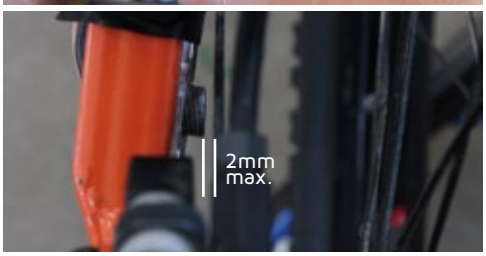
HARDWARE INSTALL

1. Fork sensor
   Tightening torque: 3 N·m {26.5 in. lbs.}

2. Rear shock sensor

3. Wheel speed sensors
   Maximum gap between sensor and disc: 2 mm





PARAY ELECTRONIQUE

DO NOT IMMERSE

The BDL Module, sensors and connectors are splash proof. However, they should not be immersed in water for any period of time. Also, avoid the use of a pressure washer while the equipment is on your bike. It is suggested to routinely put a little amount of chain lube on the front and rear travel sensor rods to prolong their life in harsh conditions.

Alexandre Palardy
apalardy@parayelectro.com

parayelectro.com