

## Instruction Sheet: Force Dual Range

*The force sensor must be used in conjunction with a Logbook datalogger. It can be used as a balance as well as a force sensor.*

### **The functions of the force dual range sensor:**

- This version of the sensor has two ranges;  $\pm 8\text{N}$  and  $\pm 50\text{N}$ .
- You can switch between these using the “range” button on the sensor. The LED light shows which range has been selected.
- The force sensor attachment pack (S1642) includes hooks and springs that enable the force sensor to be suspended and used to show oscillations.



### **How to setup the force sensor in Logbook Graphing using a Logbook datalogger:**

- Plug the force sensor into one of the channels on the datalogger.
- Connect the datalogger to the PC via USB and open Logbook Graphing.
- A meter screen will appear and the force sensor readings will be displayed as one of the channels.
- To zero the force sensor, hold the “Tare” button on the sensor for approximately 2 seconds and then release. The meter on Logbook Graphing will now be 0N.
- There is an “invert” button on the meter screen in Logbook Graphing which can be used to switch between the + or – figure.
- A log can be started by using either the “Quick Start a Log” or the “record live” function. For information on how to use the “record live” function see the Logbook Graphing instructions manual downloadable from [www.sciencescope.uk](http://www.sciencescope.uk).