

## Instruction Sheet: Carbon Dioxide

*The carbon dioxide sensor must be used in conjunction with a Logbook datalogger.*

### **Calibrating the carbon dioxide sensor using a Logbook datalogger:**

- In order to calibrate the carbon dioxide sensor accurately place it in a well ventilated room where the CO<sub>2</sub> levels are at background level.
- Leave the sensor for 15 minutes before starting the calibration process. If the sensor has been exposed to high levels of CO<sub>2</sub> then leave it for 60 minutes.
- Connect the carbon dioxide sensor to a datalogger.
- Press and hold the Set 400 button on the sensor for roughly 6 seconds.
- Release the button and wait for the reading to fall to around 400ppm. This shows that the sensor is calibrated and ready for use.

### **Setting the carbon dioxide sensor up in Logbook Graphing using a Logbook GLE datalogger:**

- Plug the carbon dioxide sensor into the Logbook GLE.
- Connect the GLE to the PC via USB and open Logbook Graphing.
- A meter screen will appear and will show the carbon dioxide sensor in one of the channels.
- There are two sensing ranges available on this sensor which can be switched between using the range button.
  - Fast: Reacts quickly to changes in CO<sub>2</sub> levels. This is best for measuring exhaled air.
  - Slow: This range reacts slower to the changing levels of CO<sub>2</sub>. This is recommended for use with extended length experiments and will produce a smoother graph.