

1. Heart Rate & Pulse Waveform Sensor

Pupils of all ages are keenly interested in how physical and mental stress affects their heart rate. The sensing clip (pleth) can be attached to a finger or earlobe to measure either blood flow (pulse waveform) or heart rate (beats per minute).

It works best if the test subject keeps their finger with the sensing clip absolutely still.

Ranges:

- 0 - 200 beats per minute
- $\pm 2000\text{mV}$ waveform

Applications include:

- Heart rate changes due to activity
- Recovery rate
- Pulse rate
- Effects of food (chocolate) or mild stimulants (caffeine)
- Effect of music on pulse rate
- The effect of the strictest teacher entering the room!

Code	Pack	Price
LOG3105	Each	£98.00

2. Push Button Reaction Switch

Fitted with a red LED, a pair of these switches can be used to test students' reaction times. One switch can be used for manual marking of events during data logging activities.

Applications include:

Physics:

- Stopwatch Start/Stop
- Introducing speed

Biology:

- Reaction times

General:

- Walking a set distance
- Recording the time taken by a vehicle to pass from one point to another

Code	Pack	Price
LOG3240	Each	£28.00

3. Crocodile Clips

A crocodile clip lead is normally used attached to a home-made or commercial switch. They can be used singly or in pairs to provide timing and event monitoring/trigging.

Typical investigations:

- Timing an event with the crocodile clips attached to a 'pupil' designed switch e.g. a pressure mat sensitive enough to detect a small animal
- A reaction time investigation – using home-made reaction switch with a simple circuit and lamp
- Gravity investigations – record the time from A to B as an object falls using a home-made digital 'target area' as input B

Code	Pack	Price
LOG3219	Pair	£17.00

