

## Manual for Reaction Timer



The reaction timer consists of a Control Unit and a Response Unit connected by a cable. The Response Unit is connected to a Vibrator Unit and a Foot Switch. The Control Unit must be connected to a Timer (not included). We recommend 2002.60 Student Timer but other Timers with two DIN 6 pole connectors should be compatible.

### Control Unit

Choose between the following stimuli: Red color, Green color, Sound and Vibration. The stimuli can be administered alone or in any combination of the four different stimuli.

### Response Unit

The Response Unit has a built-in speaker for sound stimuli plus a red and a green LED for color stimuli. A red stop button is used for response by hand and the cabled Foot Switch is used for response by foot. An external Vibrator Unit is connected by cable and is designed to be held in the hand or placed in the elbow or knee joint.

### Advice for experiments

1. Make sure the test person has his/her back turned to the person controlling the stimuli. The buttons are silent so it should not be possible for the test person to hear when the stimuli are started.
2. Repeat each stimuli 10 times and use the mean value. Mix different stimuli to prevent habituation.

### Ideas for tests

- Response with left or right hand and left or right foot
- Response to light with both eyes and with each eye in turn
- Response to sound with both ears and each ear in turn
- Place the Vibrator Unit on different parts of the body: under a bare foot, in the hand, on the back etc.
- Difference between hand and foot with the same stimuli
- Multitasking: Stimuli response with the Foot Switch while the test person is dictated a text and writing it on a computer.

### Ideas for Questions

1. Which senses (receptors) is involved when using the different stimuli?
2. What can affect the reaction time of the test person? Fatigue, temperature, age, alcohol, etc.?
3. Try to explain the differences in response time from what you know about the function of the different senses.