

# Resonance Apparatus

## Vertical Air Column



### SW3025-001 Resonance Apparatus

#### Description:

The IEC 'Resonance Apparatus' is designed to perform standard experiments relating to resonance in air. The unit is complete with a simple plastic water reservoir, vertical resonance tube, a tuning fork and vertical support column complete with metric scale.

Length: 200mm	Width: 130mm	Height: 1100mm	Weight: 1.2kg
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**INDUSTRIAL EQUIPMENT & CONTROL PTY.LTD.**

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### Component Parts Are:

- 1 pce. Long aluminium rail with adjustable support plate, scale and end cap
- 1 pce. Base, with flat magnet to hold tuning fork.
- 1 pce. Tube to create the air column.
- 2 pcs. Plates with spring clips for holding the resonance tube.
- 1 pce. Water vessel, plastic, with nut.
- 1 pce. Foam plastic ring for neck of water vessel.
- 1 pce. Wire frame to fit into the support plate and to carry the water vessel.
- 1 pce. Rubber hose, fitted with stoppers and tails for connection.
- 1 pk. 4x Screws to attach tube to base,.
- 1 pce. Tuning fork, hand held. 512Hz.

This instrument can be supplied either assembled or in kit form. If the unit is supplied assembled, many of the component parts will be already used.

### OPERATION:

The plastic container is partly filled with water so that the water in the tube can be adjusted for height as the container is raised and lowered up and down the vertical column.

The mouth of the tube should be on the zero line of the scale on the column and the length of the air column is measured on the scale in millimetres.

The tuning fork is struck on the pad on the top of the column and is held very close to the mouth of the tube to agitate the air column. As the air column length is altered, the points of resonance are heard by placing your ear close to the mouth of the tube.

At the resonant points, the sound becomes louder.

Refer to the physics text books for the experiments to be performed.

Designed and manufactured in Australia

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