



**Product Code . DS-LE-10851**

## Boyle's Law Apparatus

### Description

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#### DESCRIPTION :-

Self-contained bench-top experiment

The bench-mounting equipment includes a back plate that holds two clear-walled cylinders containing oil (supplied). Students use hand operated pumps (supplied) to increase or decrease the pressure in the left-hand cylinder (the reservoir) which moves a 'liquid piston' of oil in the right-hand cylinder (the test cylinder).

This piston compresses or decompresses a trapped column of air in the test cylinder.

The equipment uses normal, clean, dry air, as it behaves as an ideal gas over the range of pressures used in this equipment.

A digital indicator measures the change in height of the trapped air column. When multiplied by the cross sectional area of the column, this gives the change in volume.

A mechanical pressure gauge measures the pressure of the trapped air.

Highly visual experiment using a liquid piston for reliability and accurate, repeatable results, Simple and safe to use Include a thermocouple and digital display to help maintain constant, temperature and show how compression and decompression of a gas can affect its temperature, Would be supplied with hand-operated pumps to compress or decompress the gas (air) above and below atmospheric pressure.

