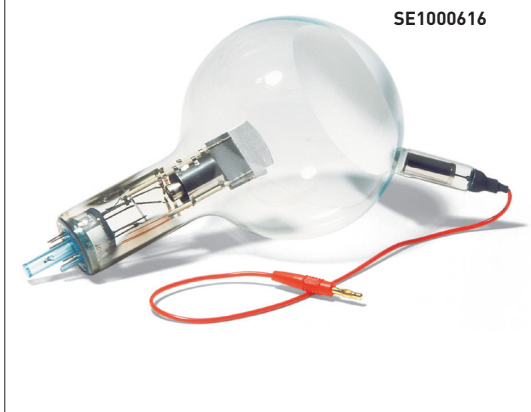


1 



## 1. Perrin Tube

Highly evacuated electron tube with focusing electron gun and fluorescent screen inclined relative to the beam axis so that the path of the beam can be seen and the effects of electric and magnetic fields can be studied. The electron beam can be deflected using two methods: electrically using electric field of the built-in plate capacitor, or magnetically using external Helmholtz coils. Also determine the fundamental electron charge-to-mass ratio ( $e/m$ ) and study mean electron velocities using field cancellation.

- Max. filament voltage: 6.3V AC
- Max. anode voltage: 5kV
- Max. capacitor voltage: 500V
- Anode current: approx. 0.1mA at 4kV

Code	Description	Pack	Price
SE1000616	S type	Each	£551.84
SE1000650	D type	Each	£572.22

2 



## 2. Auxiliary Coil for Perrin Tube

The auxiliary coil can be used to apply crossed magnetic fields vertically with respect to the tube axis, if the coil is mounted on the universal holder between the Helmholtz coils. Such fields can be used to demonstrate the horizontal deflection of cathode rays in the Perrin tube and, thus, the basic principles of a cathode-ray oscillograph, for example in generating Lissajous figures.

- Number of coil turns: 1000
- Load rating: max. 2.0A
- DC resistance: approx. 7.2Ω
- Connections: 4mm safety jacks

Code	Pack	Price
SE1000645	Each	£181.28

3 



## 3. Thomson Tube (S Type)

High-vacuum electron tube with high-accuracy electron gun and ruled target phosphorescent screen. Determine the fundamental electron charge-to-mass ratio ( $e/m$ ), study mean electron velocities using field cancellation, and explore electron optics using this tube. The electron beam trajectory can be manipulated using two methods: deflection induced by the electric field of the built-in plate capacitor, or magnetically using external Helmholtz coils.

- Max. filament voltage: 6.3V AC
- Max. anode voltage: 5kV
- Max. capacitor voltage: 500V
- Anode current: approx. 0.1mA at 4kV

Code	Pack	Price
SE1000617	Each	£810.00