

U10110 Tuning fork c 128 kHz with recording stylus

Instruction sheet

5/03 ALF



The tuning fork with recording stylus demonstrates sound oscillations and allows the motion of the oscillation to be traced on a blackened glass plate.

1. Safety instructions

- Be very careful when using an open flame to blacken the glass plate.

2. Description, technical data

The tuning fork is caused to oscillate at a large amplitude by tapping it lightly. One of the two prongs of the fork has a metal tip that can be used to record the motion by tracing it onto the included glass plate.

Resonant frequency:	128 Hz
Total length:	280 mm
Dimensions of glass plate:	185 mm x 75 mm

3. Operation

3.1 Blackening the glass plate

- Dip cotton wool in turpentine and set it alight in a fireproof dish.
- Move the glass plate above the blackening flame so that the plate is coated evenly with black soot. *Alternatively*
- Lightly smear the plate with oil.
- Scatter lycopodium powder on the plate so that an even coating results.

3.2 Experiment

- Attach the handle of the tuning fork firmly to a stand.
- Place the blackened plate on the bench so that the metal stylus just touches it.
- Set the tuning fork into oscillation with a slight tap.
- Draw the glass plate along beneath the stylus at a speed of about half a meter per second.