

### **Door opening**

A single lock located at the bottom right hand corner closes the door. The security key has a raised tab and this should be aligned with the slot in the lock in order to open the door. The key can then be turned 90° counter-clockwise.

### **Changing Chart**

In order to change the chart the centre hub must be removed. Take hold of the centre hub and turn the sprung, knurled centre cap by rotating it counter-clockwise, until it releases. The chart can then be slid off the instrument. Replace with a new chart by sliding the chart under the retaining fold at the top of the instrument and position over the centre hole. To replace the sprung centre screw, re-align it with the hole, push the screw down and turn until it has tightened (it should only be finger tight).

**Aligning the chart with the pen** - Loosen the centre cap and rotate the chart gently until the pen tip is coincident with the current time and day, gently re-tighten the cap by rotating it clockwise until finger tight.

### **Calibration**

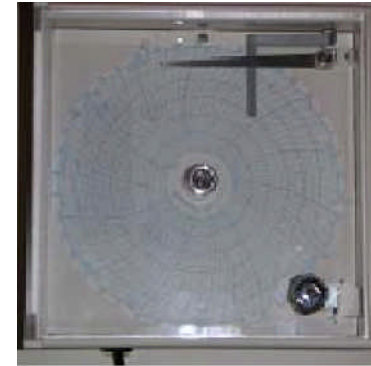
The Mini-Chart recorder is pre-calibrated and should require no adjustment, however, the pen position can be altered by holding the pen arm with finger and thumb near to the spindle and gently turning the M3 lock nut on top of the spindle with a nut-spinner. This can be repeated until the pen nib indicates the required temperature.

### **Breakdown**

In the event of incorrect operation contact the manufacturer or the supplier for advice.

**Dismantling will invalidate the warranty.**

## **Instructions Manual - Mini-chart**



**For remote bulb models** Carefully uncoil the capillary and locate the sensor in the required position for optimum monitoring.

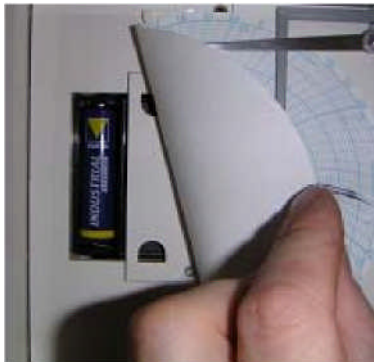
**Wall mounted** For wall mounting remove the chart and use the top and bottom holes on the rear of the instrument to fix to the wall with two suitably sized screws. See diagram

**Panel mounted** The panel mounted units have two integral clips which enable them to be easily mounted into a DIN size cut-out directly from the front. Insert the instrument into the cut-out and turn the door lock counter-clockwise by 90°C to open the door. Once the chart is removed the two large screw heads in the centre of the top and bottom edges should be gently tightened clockwise with a screwdriver to rotate and to draw the two securing lugs up towards the back of the panel. The Mini-Chart is now mounted securely. See diagram.



**Battery powered**

Fit the battery taking care to ensure the correct polarity. Battery positive is indicated in the battery compartment of the Mini-chart under the chart inside the instrument. After 10-12 months, or if the chart fails to rotate, replace the battery with a sealed, non-rechargeable, long-life battery, size AA cell.



**Mains powered**

The Mini-chart should be connected to a suitable power supply with the lead provided. When connected a red LED in the top left hand corner will be lit. If the LED fails to light then check the supply, if this proves to be in working order then proceed to check the rechargeable battery is located securely in the battery holder. **(This battery must not be removed as this will prevent the Mini-chart from working. It is important not to**

remove the re-chargeable battery located under the chart as the chart will cease to rotate.)

**Changing the pen**

Wait until the unit is within its calibrated operating temperature range. Remove the pen from its packaging (remove & retain the tip seal) and gently moving the pen arm lifter to the right the pen arm will rise, slide the pen onto the pen arm taking care that the tip points toward the chart. Once the pen is located correctly move the pen arm lifter back to the original position. Undue force should be avoided as the pen arm is sprung to ensure optimum contact pressure with the chart. If at any time the pen arm is bent so that insufficient force is being applied to make a trace on the paper then the nib should be removed and light pressure exerted on the arm as near as possible to the spindle until the other end of the pen arm is resting about 5mm from the paper. The pen nib can then be attached once again.

