



# INSTRUCTION MANUAL



Laboratory Equipment Pty Ltd

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email: [sales@labec.com.au](mailto:sales@labec.com.au)  
Ph: 02 9560 2811 • Fax: 02 9560 6131  
[www.labec.com.au](http://www.labec.com.au)

## **Introduction**

Congratulations on the choice of another quality product. Labec products are manufactured, tested and calibrated to meet published standard specifications under our strict quality assurance guidelines.

This Instruction Manual is for the guidance of operators of Labec heating mantles and should be read before connection to the electricity supply.

It is hoped that this manual will supply all the information that the customer should require for satisfactory operation of this product. If, however, there are any questions that remain unanswered then the customer should contact our service department.

## **Unpacking**

Remove all packing and protective wrapping from both interior and exterior of the heating mantle. Check the mantle for possible transit damage. Ensure all ordered accessories are present. If any physical damage or shortages are evident, do not discard the packaging material until the equipment is inspected by the distributor, agent or manufacturer.

*NOTE: All claims for shortage or damage must be made within fourteen days (14) from delivery.*

Subject to our standard published conditions of sale, we have reasonable grounds to believe that we have ensured, so far as is reasonably practical, that the products listed in our catalogue and brochures have been designed and constructed so as to be safe and without risk to health when properly installed and used in their environment by appropriate and trained personnel, and where applicable, in accordance with our published instructions.

## **Installation**

### **Electrical**

**This equipment must be tagged and tested according to AS/NZS3760:2010 prior to use and thereafter on a regular basis dependent upon the environment.**

It is preferable to locate the mantle close to a power point and recommended that double adaptors are not used. Check the total wattage if connecting to multipoint outlets. Check the rating plate for power requirements. Installation is to be carried out by a qualified electrician in accordance with the power requirements of the product specifications. The unit must be EARTHED.

## **Operation**

1. Connect to power supply
2. Do NOT pour any water or solution into the mantle.
3. The first time the mantle is used, the insulation will produce white smoke and its fibre cloth will become black. This process will discontinue after approximately 20-30 minutes; its surface will recover to white after this.
4. To evaporate more quickly adjust controller to maximum.
5. Adjust temperature using simmersat controller.
6. The insulation material of the mantle reaches a temperature of approximately 450°C.

## **Declaration of Conformity**

Each product is thoroughly inspected and tested to not only ensure that it meets the specifications provided, but to also meet Australian Electrical Standard AS3820 and EMC Standard AS/NZ1044:1995, and therefore being accredited with a C Tick label.

## INSTRUCTIONS MANUAL for SPILLPROOF FLASK HEATER/e

|                    |                               |          |
|--------------------|-------------------------------|----------|
| <b>Model K-1</b>   | for flasks 250, 500 1000ml,   | 550W     |
| <b>Model K-2</b>   | for flasks 500, 1000, 2000ml, | 750W     |
| <b>Model K-1/4</b> | for flasks 250, 500, 1000 ml, | 4 x 550W |
| <b>Model K-1/6</b> | for flasks 250, 500, 1000 ml, | 6 x 550W |

### IMPORTANT SAFETY INSTRUCTIONS

#### WARNING

- 1) Do not heat any substances above temperature which will cause hazards of explosion, implosion or release of toxic or flammable gases arising from the materials being heated
- 2) Do not use in the presence of flammable or combustible materials or explosive gases.  
Do not use in the presence of pressurized or sealed containers.  
Fire or explosion may result, causing severe injury or death.
- 3) To avoid electrical shock, always use a properly grounded electrical outlet of correct voltage and Current handling capacity.
- 4) The user has the responsibility for carrying out appropriate decontamination, if hazardous material is split on or inside the equipment.
- 5) The user shall be aware that, if the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
- 6) The instrument should be placed so, that handy operation of the ON-OFF Switch is possible.
- 7) Service only by a qualified service engineer.
- 8) Always disconnect from power supply prior to maintenance and servicing.
- 9) The instrument may be hot to touch, even when the pilot light is off.

### OPERATION INSTRUCTIONS

Connect the instrument to a ground mains outlet, after ensuring that the Voltage is the same as given on the name plate. The Instrument must be connected to an earthen (grounded) supply.

#### HEATING SYSTEM :

The Electronic Heat controller maintains a set temperature of the heater by turning the power controller. For fast heat-up, turn the knob to Full position.

When the desired temperature is reached, reduce the setting to the point where the temperature will be maintained. The pilot light is always on when the power is on.

To avoid "Hot Spots" in the liquid, the flask can be lifted by a support-rod equipped with a clamp, which can

be fastened on the rear bracket of the instrument.

**CAUTION** : When turning OFF the control be sure the knob is on OFF position and the indicator light is out.

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