



**Laboratory Equipment Pty Ltd**

**INSTRUCTION MANUAL**  
**FOR LABEC COLD PLATE**

*Laboratory Equipment Pty Ltd*  
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## Introduction

Congratulations on the choice of an Australian made 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 Cold Plates and should be read before the water Cold Plate is connected to the electricity supply.

It is hoped that this manual will supply all the information that the customer should require for satisfactory operation of the water Cold Plate. 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 water Cold Plate. Check the water Cold Plate for any 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 water Cold Plate 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 Cold Plate close to a power point and recommended that double adaptors are not used. Check the total wattage if connecting to multi-point 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. **Ensure the unit is Tag Tested prior to first power up.**

### Location

Select a location free from draught and away from direct sunlight or other heat source.

### Temperature Control - See Appendix A

LABEC Cold Plates are fitted with a digital temperature controller as per Appendix A, connected to the element and cooling system. The water Cold Plate has been stringently tested before shipment to ensure all is in working order.

### Description of Controls - See Appendix A

Set the desired temperature or heating level by adjusting the temperature controller as per Appendix A.

### Cooling System

The Cooling system uses a CFC free refrigeration compressor to cool the aluminium Plate of the Cold Plate. Turn it off above 30°C to reduce wear on the cooling system. The cooling will run continuously will maintain the temperature on the set value. Clean the cooling system air filter inlet monthly by wiping with a damp cloth or vacuum cleaner.

### Caution

Please observe the following safety measures before using your LABEC equipment.

1. These Cold Plates are **NOT FLAME PROOF** and under no circumstances should inflammable, combustible or explosive material be placed in the water Cold Plate.
2. Low ignition temperature materials and those materials which give off inflammable or explosive vapors should not be placed in or near the water Cold Plate.

3. Avoid heating substances which give off corrosive vapor.
4. Users are advised of the dangers of heating combustible materials. The manufacturer can recommend special types of elements which will prohibit the Cold Plate temperature reaching known ignition points.
5. Observe those rules pertaining to wiring and installation of electrical appliances as recommended by the local supply authority.

**WARNING**

It is detrimental for any of the substances listed below to be inside this equipment. The interior of the water Cold Plate may be damaged if exposed to any of them. Corrosion of the stainless steel and other surfaces will be directly attributable to the presence of one or more of these substances and will not be a defect or failure for which the manufacturer will accept responsibility.

ORGANIC SUBSTANCES	SALT	ACIDS	MISCELLANEOUS
ALKAFORM	AMMONIUM BROMIDE	ACETIC	BROMIDE
ANAESTHESIA	AMMONIUM CHLORIDE	BORIC	CHLORINE
CARBON	CALCIUM CHLORIDE	CARBOLIC (PHENOL)	FLUORINE
TETRACHLORIDE	CALCIUM HYPOCHLORITE	CHROMIC	IODINE
FORMALDEHYDE	FERRIC CHLORIDE	HYDROCYAIC	SULPHUR DIOXIDE
LYSOL(CRESOLS ETC)	HYDROGEN PEROXIDE	NITRIC	
TRICHLORETHYLENE	MAGNESIUM CHLORIDE	OXALIC	
	MERCURIC CHLORIDE	HYDROCHLORIC	
	POTASSIUM CHLORIDE	PHOSPORIC	
	POTASSIUM HYPOCHLORITE	SULPHURIC	
	POTASSIUM HYPOCHLORITE	SULPHUROUS	
	SODIUM CHLORIDE	TARTARIC	
	SODIUM HYPOCHLORITE		

**Operation**

1. Connect the Cold Plate to an alternating current supply of voltage specified on the rating plate.

**DANGER: THIS WATER Cold Plate MUST NOT BE CONNECTED TO A DIRECT POWER SUPPLY**

2. Switch the MAINS on then Turn the simmerstat/thermostat or temperature controller up using the up or down keys only as required.

**Maintenance**

The casing is finished with stainless steel and to maintain appearance should be wiped over with a non abrasive cleanser. The Plate is aluminium and may also be cleaned general household grade cleaner.

**Trouble Shooting**

SYMPTOM	REMEDY
No Power  (Indicator Light is off)	<ol style="list-style-type: none"><li>1. Check the water Cold Plate is plugged in and power switched on.</li><li>2. Ensure mains power supply point is functioning by using a test appliance on power socket.</li><li>3. Check internal RCD has not tripped.</li></ol>
Failure to maintain temperature  (Indicator light is on)	<ol style="list-style-type: none"><li>1. Ensure the temperature controller set correctly</li></ol>

If the fault cannot be found call your distributor or the manufacturer quoting the serial number of the unit from the manufacturers label.

**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.