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 Incubators and should be read before the incubator 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 incubator. 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 incubator. Check the incubator for possible transit damage. Ensure all ordered accessories are present. If any physical damage or shortage is evident, do not discard the packaging material until the incubator 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 incubator 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.

Location

Select a location free from draughts and away from direct sunlight or other heat sources.

Operation

Connect the chamber to an alternating current supply of voltage as specified on the rating plate mounted on the side or rear of the chamber.

DANGER: THIS INCUBATOR MUST NOT BE CONNECTED TO DIRECT CURRENT SUPPLY!

Turn the mains switch on. Set the temperature controller to the required temperature and check to see that the illuminating lamp is illuminated. An indicating lamp on the controller will illuminate when the heaters are operating.

Final adjustment of the temperature controller may be required after the chamber has reached operating temperature and this should be checked with a suitable thermometer located in the chamber (A thermometer is not supplied with the chamber).

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

- These incubators are **NOT FLAME PROOF** and under no circumstances should inflammable, combustible or explosive material be placed in the incubator.
- Low ignition temperature materials and those materials which give off inflammable or explosive vapors should not be placed in the incubator.
- Avoid heating substances which give off corrosive vapor.
- Users are advised of the dangers of heating combustible materials. The manufacturer can recommend special types of elements which will prohibit the incubator's temperature reaching known ignition points.
- 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 incubator 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		

Heating
Heating of the incubator is by means of low density elements located in the air duct inside the working chamber. Always adjust the safety thermostat before every use.

Safety Thermostat
The incubator is fitted with an over heat safety thermostat. It must be set to slightly above the desired set point temperature and will prevent overheating. It will maintain the temperature you set on the thermostat. Set the thermostat by turning to full and allowing the chamber to stabilise at the desired set temperature. Then slowly turn the dial anticlockwise until the power to the heaters turns off (thermostat will click on and off as you pass the chamber temperature), note the temperature on the thermostat at this point. Then turn the dial clockwise again to switch the power back on. Turn the dial anticlockwise again until it is slightly above the temperature at which point you noted the chamber switched off. This is now set around 5°C above the desired set point and will switch off all power to the elements should the oven reach this temperature.

Cooling
A cool switch on the front panel should be in the on position unless using the chamber above 30°C. If no cool switch is fitted the cooling runs at all times. Use above 35°C should be minimised. If the safety thermostat is set to 0 or Off the unit will not heat and will freeze, be sure to set this first.

Temperature Control
Labec incubators are fitted with solid state proportional action digital temperature controllers which operate from a sensitive thermocouple or Rtd inserted in the working space of the chamber. The controller has been calibrated at 20°C and 10°C, before any adjustments to temperature are made allow the incubator temperature to stabilise for at least one hour before adjusting the temperature setting. For the digital controller fitted please read the enclosed operating instructions when setting the controller temperature.

Defrost Timer

If a defrost timer is fitted it will defrost the cooling coil every 6 hours for 4 minutes. The condensate will run into a defrosting pan which will automatically evaporate the condensate. If the defrost tray overflows contact the manufacturer and switch off the incubator. The incubator should be defrosted by switching off the power for 24 hours at least twice annually. If the temperature is affected during the defrost timer period, contact the manufacturer for instructions on reducing defrost cycle period and time.

Maintenance

The cabinet is finished with painted steel. To maintain appearance it should be wiped over with a cloth and non abrasive cleanser. The chamber is manufactured from formed plastic and may be cleaned with a cloth and general household cleanser. Incubators are fitted with a fan motor with pre-lubricated and sealed bearings which should not require maintenance for some time depending upon extent of usage. The shelves are manufactured from plastic coated steel and a cloth and non abrasive cleanser should be used. The silicone door gasket should be cleaned with detergent only, ensuring it is dried completely after washing. A drain tray at the rear base should be regularly checked, drained if full and cleaned.

Trouble Shooting

SYMPTOM	REMEDY
No Power (Indicator Light is off)	1. Check incubator is plugged in and power switched on. 2. Ensure mains power supply point is functioning by using a test appliance on power socket. 3. Check internal RCD has not tripped.
Failure to heat or maintain temperature (Indicator light is on)	1. Ensure the temperature controller set point is above ambient. 2. Check the safety controller fitted is above the main controller setting.

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.