



Laboratory Equipment Pty Ltd

**INSTRUCTION MANUAL
LABORATORY FRIDGE & FREEZER
THERMOSTAT CONTROL**

Laboratory Equipment Pty Ltd
"Proudly Australian Owned and Operated."
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Introduction

Congratulations on choosing another quality product. Laboratory Equipment 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 Laboratory Equipment Fridges and Freezers. It should be read before the fridge/freezer 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 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 the interior and exterior of the fridge/freezer. Check the fridge/freezer 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 fridge/freezer 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.

Electrical Installation

This equipment must be tagged and tested according to AS/NZS 3760:2010 prior to use and thereafter on a regular basis dependent upon the environment.

It is preferable to locate the fridge/freezer close to a powerpoint and recommend 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. The unit must be EARTHED.

DANGER: THIS FRIDGE/FREEZER MUST NOT BE CONNECTED TO DIRECT CURRENT SUPPLY

Alarm Output (If fitted)

If the fridge/freezer has a safety alarm controller output fitted the AUX alarm output connection can be connected to an external device such as a phone dialler or similar or building maintenance system to indicate temperature fluctuations. Do not set the alarm hysteresis too close to the set temperature or the alarm will activate too often. Adjust the ATD time to delay the alarm for a period of time to prevent alarming in such cases as door open or loading product.

Operation

1. 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. The main temperature controller will turn on automatically.
2. The temperature controller will switch the fridge/freezer on and control temperature.
3. Set the alarm values if required.
4. Set the temperature controller at the required thermostat dial.
5. 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).
6. The shelves can carry around 20 kilograms each.

Temperature Controls

Adjust temperature using thermostat dial. 1 on the dial for warmer, 7 for colder.

Maintenance

The cabinet is finished with painted epoxy and to maintain appearance, should be wiped over with a non abrasive household cleanser. The chamber is manufactured from formed plastic or painted aluminium & may be cleaned with a gentle cleaner. The door is also plastic lined/stainless steel or glass and should only be cleaned with general purpose cleaners. If a fan motor is fitted the fan motor is pre-lubricated with sealed bearings which should not require maintenance for some time depending upon the extent of usage. The shelves are manufactured from plastic coated steel and a non abrasive cleaner should be used. The magnetic door gasket should be cleaned with detergent only, ensuring it is dried completely after washing.

The condenser fan motor should be cleaned every month by switching off the power and vacuuming the dust and wiping the grime build up away. Where possible leave the unit off with the door open every 6 months for 6 hours to allow any frost to melt away.

Defrosting

Over a period of time the chamber cooling coil will build up a layer of frost which will reduce the operation of the fridge/freezer. We recommend defrosting when the ice frost layer is around 5mm thick or when the fridge/freezer starts to slowly heat up in temperature. Turn the unit off for a period of 24 hours with the door opened to allow the frost to melt away or if a temperature of -12°C for a period of 10 minutes is acceptable then set auto defrost for a period once every 24 hours for 10 minutes. The temperature may increase to as much as -12°C but it will reduce the need for manual defrosting of the chamber as often. Product temperature should not change during the short period of the cooling compressor being switched off – no heating is used during auto defrost.

Troubleshooting

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