

SHORELINE

MEDICAL REFRIGERATORS

Models SM40, SM100, SM180, SM260 & SM360

**PLEASE READ THESE INSTRUCTIONS CAREFULLY
BEFORE OPERATING YOUR APPLIANCE**

THIS APPLIANCE MUST ALWAYS BE KEPT UPRIGHT

IMPORTANT

**This refrigerator must be run for
24 hrs BEFORE loading to
ensure correct cooling operation.**

User Instructions for Shoreline Medical Refrigerator Models SM40, SM100, SM180, SM260, SM360

· UNPACKING

Remove all packing material, external and internal.
Dispose of in an environmentally thoughtful manner.

· POSITIONING

To operate correctly and efficiently, your appliance must have sufficient air ventilation at the rear of the appliance. Avoid locations such as near heaters and sunny windows. This appliance is **NOT** suitable for use in a potentially explosive environment

· INSTALLATION

It is important to install your appliance with a minimum of 50mm clearance at the sides and 75mm clearance at the rear to allow free circulation of air. Stand the appliance on a hard smooth surface (not a carpet) in order to maintain the ventilation under and around the appliance. It should stand level or with a slit tilt backwards. If it tilts forward it could stop the door closing and sealing correctly.

· WHAT TO DO BEFORE STARTING

Clean the interior of the appliance – see section on Cleaning Your Appliance.

THIS APPLIANCE MUST BE EARTHED

220V-240V 50Hz AC supply **ONLY**

If this appliance is fitted with a non-rewirable plug for which your connection is unsuitable i.e. Fused spur cable outlet, the plug should be cut and the appropriate connection made. The removed plug must be disposed of, as insertion of the plug into a 13 Amp socket is likely to cause an electrical hazard.

If it is necessary to change the fuse in a moulded plug and the fuse cover is detachable, it must be refitted. If the fuse cover is lost or damaged the plug must not be used until a replacement is obtained.

When a non-rewirable or rewirable 13 Amp (BS1363) plug is used it must be fitted with a 13 Amp ASTA approved (BS1362) fuse. If any other type of plug is used it must be protected by a 15 Amp fuse either in the plug or at the distribution board.

The wires of the mains lead are coloured in accordance with the following code:

GREEN AND YELLOW – EARTH
BLUE – NEUTRAL
BROWN – LIVE

As the colours of the wires in the mains lead of your appliance may not correspond with the coloured marking identifying the terminals in your plug, proceed as follows:

CONNECT GREEN AND YELLOW coloured wire to the terminal marked letter 'E' or earth symbol or coloured green or green and yellow.

CONNECT BLUE coloured wire to the terminal marked letter 'N' or coloured black.

CONNECT BROWN coloured wire to the terminal marked letter 'L' or coloured red.

DO NOT push excessive mains lead into the motor compartment at the bottom rear.

- **RADIO INTERFERENCE**

This appliance complies with current British and European Standards and CE Directives.

- **STARTING**

When unpacking and cleaning is complete allow the appliance to stand for 2 hours for the refrigerant to settle. Plug your appliance into a suitable earthed socket and switch on.

IT IS ESSENTIAL WHEN USING THE APPLIANCE FOR THE FIRST TIME THAT YOU RUN YOUR APPLIANCE FOR 24 HOURS BEFORE LOADING WITH PRODUCTS TO MAKE SURE IT IS OPERATING CORRECTLY.

- **CLEANING YOUR APPLIANCE**

Your appliance is easy to keep clean. Regular cleaning is important for health reasons.

Exterior: Use a good wax polish, which will clean and polish the appliance in one easy application. Do not use an aerosol polish as the spray may damage or discolour plastic parts.

Interior: Before using for the first time, and before reusing after a period on not being used, the interior of your appliance should be wiped with a cloth dampened with a solution of one teaspoon of Bicarbonate of Soda to one litre warm water and dried thoroughly.

DO NOT use soaps, wire wool, scouring powders or disinfectants of any type.

· STORAGE

A wide variety of products can be stored but you must take care to store them correctly.

DO NOT store flammable or explosive products.

Air has to circulate freely around the interior of the appliance, so shelves must not be covered with paper or trays. Wherever possible, leave spaces between packages and containers. Do not stack packages against the rear or side interior walls to allow a free circulation of air.

· TEMPERATURE CONTROL & DISPLAY

Your appliance is fitted with a high specification electronic temperature controller designed to meet the stringent requirements needed to ensure the correct storage of temperature sensitive products. Storage temperatures provided by your appliance are factory set to hold +2°C to +8°C. An interior fan is fitted which runs continuously to maintain correct internal temperatures.

The controller displays the simulated temperature of a 20ml vial sample on the centre screen – this can be adjusted by the more advanced user. (Refer to CONTROLLER SET-UP).

There are three user keypads on the controller fascia: “**SET**” (far left), “• ” (middle left) and “• ” (middle right). By pressing “• ” the display shows the maximum recorded temperature since the last reset, whilst pressing “• ” will show the minimum recorded temperature.

In order to reset the MAX/MIN recordings, first press “• ” or “• ” together with “**SET**” simultaneously while the value is displayed. It is recommended, before loading with product and after the 24 hours running after switching, that the maximum & minimum values are **RESET**.

When the audible alarm is activated as a result of the internal air temperature (not the simulated 20ml vial temperature) staying above the high alarm temperature or below the low alarm temperature for longer than the alarm delay setting, ‘**AL**’ will flash in the controller display and the buzzer will sound. Pressing any of the keypads will silence the buzzer, although ‘**AL**’ will continue to flash until the temperature has returned to within alarm limits.

If the alarm condition continues the buzzer will sound for 1 minute every 30 minutes and cannot be silenced.

NOTE - On start up the alarm will operate after 15 minutes until the appliance has achieved correct operating temperatures. Pressing any of the keypads will silence the buzzer.

When the appliance is in the automatic defrost cycle, the display will show as ‘**dF**’. During the defrost period the alarm temperature monitoring function is inhibited but will start afresh at the end of the defrost period.

An LED light displayed beneath the • symbol on the controller display signifies when the motor compressor is actually running.

In the unlikely event of the controller sensing a probe failure, ‘**PF**’ will be displayed and the motor compressor will continue to run according to the duty cycle pre-programmed at the factory in the SETUP.

· DOOR

The door is opened by means of a handle (not SM40). To close the door, apply a gentle pressure until the magnetic door gasket seals against the cabinet surround. Do not 'slam close'. Check periodically to see that there are no gaps between the cabinet surround and the gasket seal. The door is fitted with a lock that is secured by turning the key a quarter turn. Two keys are supplied. The door is reversible (not SM40). Refer to separate instructions enclosed.

· DEFROSTING

Your appliance incorporates an Automatic Defrosting Cycle, which requires no special operations on behalf of the User. The controller has been pre-set at the factory and will periodically switch off and will not switch on again until all the frost that has accumulated on the cold plate concealed behind the rear wall has melted. The defrost water will fall into the trough at the inside bottom rear and run down the drain tube into a plastic defrost water tray mounted on top of the motor at the bottom rear of the appliance. If particles of debris block the drain it can be cleared with a piece of wire such as a pipe cleaner. Service calls to unblock drain holes are chargeable.

Correct storage temperatures will not be affected during the automatic defrost cycle.

· AFTER SALES SERVICE

In the unlikely event of you experiencing problems with your appliance, please contact us at the address below, **quoting your appliance model number and serial number as displayed on the inside or rear of your appliance.**

If something appears to be wrong, before calling for a service engineer, which could be expensive, check the following:

Make sure the plug on the mains lead fits firmly into the socket.

Check that the fuse is intact.

Check that the socket is switched 'ON'.

See that the cold control is correctly set.

Ensure the door is closing firmly and check the gasket sealing.

Consider the factors that affect the safe storage of products, such as positioning, opening & closing of the door, defrosting, cold control setting and manufacturer's recommendations.

Supplied by:

QED SCIENTIFIC LTD

Sycamore House, Eccles Road, Whaley Bridge, High Peak, SK23 7EW

Tel: 01663 735494 Fax: 01663 732744

E-mail: sales@qedscientific.co.uk Web: www.qedscientific.co.uk