

NE4-SB UNIVERSAL HEATED
THERMOSTIRRER

Clifton Range[®]

High quality products at affordable prices

Dear Customer

The Clifton Range® is part of Nickel-Electro Ltd a family firm based in Weston-Super-Mare which was incorporated as a limited company in 1941 but its roots can be traced back to 1935 when the business first started. Now in its 3rd generation of family members, the company prides itself on being a strongly established, independent British manufacturer.

Thank you for purchasing this piece of Clifton Range® temperature control equipment. To get the best performance from your equipment and for your own safety please read these instructions carefully before use.

GENERAL NOTES

1. This product is designed for laboratory use only. Always follow good laboratory practice.
2. If this product is not used in accordance with these instructions then basic safety protection may be affected.
3. The mains supply cord fitted to this product is heat resistant and should be replaced with an equivalent type by a qualified electrician.
4. Ensure that the power supply has a safety earth (ground) terminal.
5. Ensure that the mains switch and power supply connector are accessible during use.
6. Before using any cleaning or decontamination method please refer to the Maintenance and Cleaning section to ensure the proposed method will not damage the unit.
7. Connect only to a power supply with the corresponding voltage to that specified on the rating label positioned on the rear of the unit.
8. Do not block ventilation slots during use and always follow installation instructions.
9. Ensure substances being heated present no risk of a hazard (explosion, implosion or release of toxic or flammable gases) or that these have been addressed. When heating substances where liberation of gases occurs suitable extraction should be used.
10. Use only liquids specified within this Instruction Manual within their specified temperature range.
11. Drain before moving the bath.

LOCATION

The product must be placed on a smooth, level and sturdy work surface. Use in a ventilated room. Suitable for use in ambient temperatures 5°C to 40°C with a maximum humidity 80% (temperature 31°C) decreasing to 50% (temperature 40°C).

DO NOT block or restrict ventilation slots. DO NOT place directly next to hot heat surfaces. ENSURE that there is sufficient space around the product to allow it to provide optimum temperature control.

UNPACKING AND ASSEMBLY

Remove the product from its packaging and retain over the warranty period.

SAFETY



Do not touch any electrical contacts or open any closure panels.
RISK OF ELECTRIC SHOCK!!
Class 1 (IEC519-Part 2) low liquid level protection, ref to over temperature condition.

POWER LEAD AND CONNECTION TO ELECTRICAL SUPPLY



Check the electrical supply is compatible with the rating label.
IF IN DOUBT CONSULT AN ELECTRICIAN. THE PRODUCT MUST BE EARTHED!
Where the mains supply or plug connection differs refer to local regulations or consult an electrician.

LIQUID LEVEL



Always ensure the product is disconnected from the electrical supply before filling and emptying.

Minimum water level: 80mm
Maximum water level: 130mm

LOW LIQUID LEVEL FLOAT SWITCH "FiLL" MESSAGE

The thermostirrer features a low liquid level alarm - display will read "FiLL". Heating will be switched off if the liquid falls below the recommended level. Stirring action will continue. To reset top up the liquid carefully as spitting may occur.

POWER INTERRUPT DURING TIMER MODE

If the power is interrupted during the timer mode, the display shows "P.OFF" when resumed. To clear press and hold the RUN key until display reverts to actual temperature. Timer mode will then continue. To deactivate the timer press and hold the RUN key.

UNDER AND OVER TEMPERATURE ALARM

The under/over temperature alarm is automatically set 4°C below/above set temperature. When in alarm condition the "under/over temperature alarm" warning indicator illuminates and actual bath temperature is shown. All heating/cooling is switched off. Note: if an accessory dip cooler is being used cooling will continue. Once water temperature has risen above/fallen below alarm setting then the indicator clears and actual bath temperature is displayed.

Note: when in over temperature alarm condition the motor remains on but the heater is switched off.



Always investigate the cause of the over temperature alarm.

PORTABLE APPLIANCE TESTING

These tests should be conducted by a qualified person.



DO NOT PAT test unless the tank contains water.

DO NOT Flash Test!!

OPERATING INSTRUCTIONS

Switch the unit on using the mains switch located on the rear. The switch will illuminate and the controller will perform a self test. When the unit is switched off, all time and temperature values remain in memory.

SETTING TEMPERATURE

1. Press and hold the DOWN arrow, or the FUNCTION key to display SP1: the set temperature. The set temperature indicator will illuminate.
2. Use the UP and DOWN arrow keys to select required temperature.
3. After setting the temperature the display flashes between SP1 and set temperature value and will then revert to show actual liquid temperature. Heater indicator will illuminate.
4. The Clifton Universal Thermostirrer is now set and will heat and control the liquid to set temperature.

SETTING TIME

1. Press FUNCTION key until "t" appears on the display. Display will alternate between "t" and time displayed as h:mm.
2. Use the UP and DOWN arrows to select time required. Minimum 0 hours 01 minutes: 00:01 and maximum 99 hours 59 minutes: 99:59.
3. Press FUNCTION key to confirm. Display will flash 4 times then revert to actual liquid temperature.

TIMER OPERATION

1. To start the timer press the RUN key for more than 1.5 seconds. The timer will automatically start once the bath has reached set temperature. Heater indicator will illuminate continuously while liquid temperature is being raised to set point.
2. Heater indicator will flash when set temperature has been reached and is being maintained. Timer indicator will flash showing the timer is running.
3. To view time remaining press UP arrow until "t" appears and time remaining is displayed as h:mm.
4. An audible beeping and "END" message indicates timed period has finished. Press the RUN key to deactivate the beep and clear the "END" message.

CARE AND MAINTENANCE



Please ensure that the washing agent and sanitizing agent are BSI accredited and approved by the H&S department for use on laboratory equipment and stainless steel within your laboratory.

DISCONNECT THE THERMOSTIRRER FROM THE POWER SUPPLY PRIOR TO CLEANING

BASIC CLEANING

The universal thermostirrer should be cleaned at regular intervals by wiping external surfaces with a cloth or sponge soaked in warm water with a mild detergent. **DO NOT USE STRONG SOLVENTS OR SOLUTIONS CONTAINING CHLORINATED HYDROCARBONS, ESTERS, KETONES OR ABRASIVE CLEANERS AS THIS MAY DAMAGE THE BUILT IN ANTI BACTERIAL PROPERTIES.**

The “anti-bacterial” paint finish inhibits the growth of bacteria. It has been tested by independent specialist houses using internationally recognised test methods and proven to be effective against a wide range of bacteria including Escherichia Coli and Staphylococcus Aureus (MRSA).

We recognise hygienic coatings are part of a controlled approach to a cleaner working environment. Within the paint formulation is an active ingredient with proven anti-bacterial properties which is maintained throughout its life span. In a laboratory environment this is one less source of contamination. Unlike detergents the anti-bacterial paint finish does not offer an instantaneous action, but is intended for long term general protection against bacterial growth.

Moisture on the painted surface is necessary for the bacterium to absorb the agent and be affected by it. The coating is therefore less active in very dry conditions although moisture in the atmosphere will maintain some activity. Areas where moisture is trapped are difficult to clean and allow bacteria to proliferate but these areas are most active for the anti-bacterial coating improving defence against bacterial growth.

WARRANTY TERMS AND CONDITIONS

1. Nickel Electro Ltd warrants to the Customer that the product purchased is free from defects in materials and workmanship.
2. Provided the terms of payment are duly complied with, Nickel Electro Ltd undertakes to remedy any original defects arising from faulty materials or workmanship, in any goods manufactured/supplied by Nickel Electro Ltd, which under proper and normal conditions of use, may develop within a period of three years from the date of delivery.
3. In the case of components which by their nature of application have an unpredictable life, this guarantee shall only be to the extent of the guarantee given by the manufacturers of these articles.
4. Nickel Electro Ltd will accept no liability, where in the opinion of the company the defect has been caused by damage due to the Customers failure to follow operating instructions, correct installation, wear and tear, or damage due to the use of spare parts other than those spare parts of Nickel Electro Ltd or which are recommended by Nickel Electro Ltd, the defect has been caused by alterations or repairs being undertaken by a person(s) other than an authorised representative of Nickel Electro Ltd.
5. Any damage claim must be in writing, and give the serial number and description of the goods, order number and date of delivery, and will not apply where any names or serial numbers or other information which may be attached to or inscribed upon the goods have been removed, covered up or defaced in any way.
6. Any goods or parts thereof, which may require repair or replacement, shall be repaired or replaced (at the discretion of Nickel Electro Ltd) at the works of Nickel Electro Ltd. The product to be repaired shall be delivered carriage paid back to Nickel Electro Ltd by the customer at the Customer's risk and expense. Any such goods or parts will be delivered by Nickel Electro Ltd to the Customer free within the United Kingdom but if required to be borne by the Customer. All faulty parts removed from the equipment will become Nickel Electro Ltd's property. Any other repairs or work by Nickel Electro Ltd will be carried out under the terms and conditions for specialist engineers currently in force.
7. In the event of replacement with a new or reconditioned model, the replacement unit will continue the warranty period of the original equipment.
8. If any goods or parts thereof are returned unnecessarily all cost involved, including a charge for inspection, handling and the return carriage must be paid by the sender. In no circumstances shall any of the goods be returned to Nickel Electro Ltd without its prior written consent.
9. Please retain the original packaging over the warranty period.

NON WARRANTY INFORMATION

Spare parts shall be made available for a period of 3 years after a piece of equipment is discontinued.

NE4-SB UNIVERSAL HEATED THERMOSTIRRER

CLIFTON RANGE® - 3 YEAR WARRANTY



DECLARATION OF CONFORMITY

We herewith confirm the following product:
NE4-SB Universal Heated Thermostirrer

Conforms with the requirements outlined by the following European Directives:	Conforms with the requirements outlined in the following United Kingdom Directives:
Low Voltage Directive 2014/35/EU	Electromagnetic Compatibility Regulations 2016
EMC Directive 2014/30/EU	Electrical Equipment (Safety) Regulations 2016
RoHS Directive 2011/65/EU	RoHS Directive 2011/65/EU

Conforms with the requirements of the following standards:

BS EN 61010-1: 2010	Safety requirements for electrical equipment for measurement, control and laboratory use
BS EN 61010-2-010: 2014	
BS EN 61326-1: 2013	Electrical equipment for measurement, control and laboratory use - EMC requirements

Designed and manufactured in the United Kingdom by:



Nickel Electro Limited
Oldmixon Crescent
Weston super Mare
North Somerset BS24 9BL
United Kingdom
t 01934 626691 f 01934 630300
e info@nickel-electro.co.uk

FINAL INSPECTION AND ELECTRICAL SAFETY TEST REPORT

BX1082 Issue 2: April 2022

NE4-SB UNIVERSAL HEATED THERMOSTIRRER

CLIFTON RANGE® - 3 YEAR WARRANTY