



HP1 SERIES  
ANALOGUE HOTPLATES



HP1D SERIES  
DIGITAL HOTPLATES

*Clifton Range*<sup>®</sup>

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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. The mains supply cord fitted to this product is heat resistant and should be replaced with an equivalent type by a qualified electrician.
3. Ensure that the power supply has a safety earth (ground) terminal.
4. Connect to a mains power supply with RCD protection if possible.
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. 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.
8. Never touch the top plate of the hotplate. Always regard as HOT and warn others!

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## LOCATION

The product must be placed on a smooth, level and sturdy work surface. Use in a ventilated room. The HP range of hotplates should be used in modern fume cupboards where plenty of air circulation exists.

Use with a minimum distance all round of 200mm from walls or other items.

## UNPACKING

Remove the product from its packaging and retain over the warranty period. Contents consist of:

- Hotplate
- Plug and lead
- Instruction manual

## SAFETY



Do not touch any electrical contacts or open any closure panels.  
**RISK OF ELECTRIC SHOCK!!**

## 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.

## GENERAL SAFETY REMINDERS WHEN USING HOTPLATES

1. HP range are Class 0 (IEC519-Part 2) with reference to over temperature condition. These hotplates are designed that if the temperature control system fails in use the heating plate will not exceed its maximum temperature.
2. Do not pour liquids directly onto the heating plate.
3. Ensure all personnel are aware that the heating plate is HOT at all times. In free air a hob surface temperature of 400°C can be achieved.
4. DO NOT leave heating on when not in use.
5. Many solutions when heated can fume/explode/release toxic or flammable gases - follow safety precautions.

## HP1-D DIGITAL SERIES: CONTROL PANEL



### FUNCTION

Press once to display SP1 temperature setting  
Press twice to display t timer setting



### DOWN AND UP ARROWS

Use to decrease/increase a value  
Press for more than 1.5 secs to display SP1  
Hold continuously to scroll



### RUN

Press for more than 1.5 secs to activate/deactivate  
the timer function  
Use to turn off buzzer

## SETTING TEMPERATURE

1. Switch the hotplate ON at the top of the unit. The display performs a self test where all segments of the LED illuminate.
2. Press FUNCTION key once to display SP1 set temperature. The set temperature indicator will illuminate. To adjust the set temperature use the UP and DOWN arrow keys.
3. Display will flash between SP1 and set temperature and will then revert to displaying actual hob temperature.
4. The hotplate features an over or under temperature alarm which is automatically set 10°C above and below set temperature. If the hotplate temperature rises above this the alarm is activated and heating is suspended.
5. Hotplate is now set and will heat and control at set temperature.

## SETTING TIME

1. Press FUNCTION twice until t appears on the display. It will alternate between showing t and time: displayed as hh.mm.
2. Press the UP and DOWN arrow keys to selected time period. Time can be set between 00:01 and 99:59.
3. Press FUNCTION to save setting. Display reverts to actual hotplate temperature.

## HP1 SERIES ANALOGUE SERIES: OPERATING INSTRUCTIONS

1. Switch the unit on using the green mains switch.
2. Adjust the temperature using the control dial located in front of the hotplate.
3. Amber heater neon will illuminate to indicate heater activity.
4. HOT warning indicator will illuminate when the hob temperature exceeds 70°C.  
PLEASE BE AWARE: the hob temperature could be considerably hotter than this for a period of time after the indicator has gone out.

## 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 within your laboratory.

DISCONNECT THE HOTPLATE FROM THE POWER SUPPLY PRIOR TO CLEANING

## BASIC CLEANING

Stainless Steel Outer Case: Wipe clean using a soft cloth dampened with water and a mild detergent when required.

## EXTERIOR ANTI BACTERIAL PAINTED SURFACES

The hotplate 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.

## DECONTAMINATION OF EQUIPMENT

Clifton laboratory equipment can be decontaminated after spillage or contact with HIV or hepatitis infected blood samples by using rapid disinfectants.

We recommend VIRKON tablets for the safe and rapid disinfection of equipment. Please follow the User Instructions carefully. Virkon solution only requires 10 minutes contact time to be effective. Care should be taken with stainless steel tanks and it is important that virkon solution is not left in contact with metal surfaces "for longer than is necessary".

We recommend PERASAFE powder for the safe and rapid chemical sterilant of equipment. Please follow the User Instructions carefully.

Please contact your distributor or Day-Impex Ltd for further information relating to these products.

## 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 extend 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.
7. 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.
8. In the event of replacement with a new or reconditioned model, the replacement unit will continue the warranty period of the original equipment.
9. 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.
10. 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.

### Common Spare Parts

Description	Part Number	Quantity	Where Used:
Thermostat	SA01169	1	HP Analogue Series
Socket	EX0854	1	HP1-1
15 Amp Circuit Breaker	EX0550	2	HP1-2 and HP1-3
Switch	ES0241	1	HP-D Digital Series
Relay	EX1035	1	HP-D Digital Series
Temperature Controller	EX1117	1	HP-D Digital Series
8 Amp MCB	EX0845	2	HP1-1D
15 Amp MCB	EX0550	1	HP1-2D and HP1-3D
Probe	ET0823	1	HP-D Digital Series



### DECLARATION OF CONFORMITY

We herewith confirm the following product:  
HP1 Series Analogue Hotplates  
HP1-D Series Digital Hotplates

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 2012/65/EU	RoHS Directive 2012/65/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