COOLED INCUBATORS
NE7S SERIES

INCUBATORS
NE8S SERIES

Clifton Range®

High quality products at affordable prices

Contents

Dear Customer,

Thank you for purchasing this piece of Clifton Range laboratory 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.
4. 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.
5. Connect only to a power supply with the corresponding voltage to that specified on the rating label positioned on the rear of the unit.
6. Ensure that the power supply has an earth (ground) terminal.

Specimen Safety

It is the users responsibility, to ensure that the temperature set on the instrument, is at a level where no damage is caused to diagnostic specimens used with the equipment. In the event of this instrument malfunctioning, all specimens within the device should be checked to ensure no harm or damage to the specimen has been caused.

Symbols

This symbol appears in documents and on equipment to warn the user that there are hot surfaces on the equipment.

This symbol appears in documents and on equipment to warn the user that instructions must be followed to ensure correct or safe operation.

User Safety

The equipment you have purchased complies with the following European Directives EMC Directive 89/336/EEC and Low Voltage Directive 73/23/EEC as indicated in the EC Declaration of Conformity included in the document. This instrument has been designed and constructed in a manner which minimises the risk of electrical shock to the operator, offers maximum protection from overheating and provides clear and adequate labelling of instrument controls.

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

DO NOT:
Block ventilation slots during use.
Use metal instruments or scouring agents to clean the interior of the oven.
Install the instrument outside, in damp environments or areas which can be flooded.
Install the instrument near flammable or volatile substances, acids or in corrosive environments.
Store inflammable or volatile substances inside the instrument, touch live parts of the instrument, operate the instrument with damp hands, place vessels containing fluids on the instrument, climb or place any objects on the instrument.
Do not use without appropriate training.

DO:
Ensure the mains switch and power supply connector are accessible during use.
Disconnect from the power supply before moving the instrument.
Ensure that the mains supply cord fitted is replaced with an equivalent type if damaged.
Follow the installation instructions.
Follow the operating and maintenance instructions. If the instrument is not used in accordance with these instructions, then basic safety protection offered by the equipment may be affected.
Always follow good laboratory practice by ensuring substances being heated present no risk of hazard (explosion, implosion or release of toxic or flammable gases).

Unpacking

Prior to opening the packaging check the Tip and Tell Label to ensure the instrument has not been tipped during transit. If tipped please notify Nickel Electro Ltd or your local distributor immediately. Remove the product from it packaging. Any damage to the product notify Nickel Electro Ltd or your local distributor immediately. Retain packaging over warranty period.

DO NOT LIFT USING THE DOOR OR DOOR HANDLE
Remove the unit from its packaging . Check its condition and accessories.

Power Lead and Connection to Electrical Supply

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

POSITIONING AND LEVELLING

1. The instrument should be placed on a hard surface, in a dry, airy place with low relative air humidity (maximum 60% RH, no condensation). The ambient temperature should be +10 to +28˚C.
2. The instrument should not be placed in direct sunlight and near energy sources.
3. The instrument has not been designed to work in highly dusty environments.
4. Once the instrument has been positioned, it needs leveling. Afterwards it should be inspected using a spirit level put on a flat part of the unit.
5. The instrument should be placed at least 100mm away from the wall.
6. The instrument should be placed in such a place as to ensure at least a 300mm gap between the top of the unit and the ceiling.
7. The instrument must not be built-in.

Front View

Rear View

Sockets and connections can be found in the top of the rear of the instrument, these are indicated below:

Mains power switch, on far side.

RS232 connection.

USB connection.

Controls, cooling fan.

Fuse socket.

Mains power lead.

Exhaust flap.

Fan for Drying Oven chamber heating.

Specification

The Clifton Range of Incubators feature intuitive easy to use controls with on screen guidance within a bold illuminated LCD display, offering precise time and temperature control. The incubator can run at a set temperature immediately, delay start or commnce to start in the future at a given date and time. . Digital display with 0.1˚C accuracy, voltage 220-240V 50-60Hz.

NE8-15S

Dimensions: External: 515w x 440d x 550h mm, Internal: 320w x 180d x 240h mm
Capacity: 15L
Heater Power: 300 Watts

NE8-32S

Dimensions: External 595 x 495 x 630h mm, Internal: 400 x 250 x 320mm
Capacity: 32L
Heater Power: 300 Watts

NE8-56S and NE7-56S

Dimensions: External 590w x 600d x 700h mm, Internal: 395w x 360d x 395h mm
Capacity: 56L
Heater Power: 400 Watts

NE8-112S and NE7-112S

Dimensions: External: 650w x 700d x 845hmm, Internal: 460w x 450d x 540h mm
Capacity: 112L
Heater Power: 400 Watts

NE8-240S and NE7-240S

Dimensions: External: 815w x 760d x 1140h mm, Internal: 600w x 510d x 800h mm
Capacity: 240L
Heater Power: 800 Watts

NE8-400S and NE7-400S

Dimensions: External: 1015w x 760d x 1380h mm, Internal: 800wx510dx1040h mm
Capacity: 400L
Heater Power: 1200 Watts

NE8-750S and NE7-750S

Dimensions: External: 1260w x 865d x 1590h mm, Internal: 1040hx600dx1200h mm
Capacity: 750L
Heater Power: 1800 Watts

Cleaning and Maintenance Instructions

Before cleaning the instrument, it needs to be disconnected from the electrical supply!

Cleaning the Exterior of the Instrument

1. The housing of the instrument and control panel should be cleaned at least once a week (depending on working conditions) a small quantity of mild detergent applied using a soft cloth.
2. Electrical parts should not be in contact with water or detergent.
3. Units with cooling system: Clean the compressor and the evaporator with a vacuum cleaner, dry cloth or a brush at least once a month! Pull out the cover to access and after cleaning close the cover. Please note: your warranty is void if this is not adhered to.

Cleaning the Interior of the Instrument

1. The heating chamber should be emptied of any sample before cleaning.
2. Only water or water with mild detergent should be used, and should be applied with a soft cloth.
3. Having finished cleaning, you should allow the instrument to fully dry and re-fit all accessories which were removed prior to cleaning.
4. During cleaning care should be taken not to damage the internal temperature sensor.
5. The base of the drying chamber can become discoloured over time due to the heaters located under the metal base. This is completely normal and does not effect performance of the Drying Oven.
6. Electrical parts should not be in contact with water or detergent.

WARNING:

SCOURING PADS OR DE-SCALING AGENTS MUST NOT BE USED TO CLEAN THIS INSTRUMENT.

Taking Care of the Instrument When Not in Use:

1. Remove all objects from the drying chamber.
2. Disconnect the instrument from the main power supply.
3. Clean and dry the heating chamber.
4. Leave the door open to avoid nasty smells.
5. Store in temperature between 0°C and 50°C and a maximum relative humidity of 70%.

PAT Testing

Portable appliance testing should be carried out by a qualified person. This equipment should not be flash tested!

Operating Instructions

Before using the instrument, it is recommended to heat the drying chamber. Before the heating process, please clean the drying chamber in order to avoid permanent stains. Turn on the unit and set the temperature at maximum. Let the unit work for 3 hours. During the heating, the unit is likely to produce a specific metallic smell.

Turning On

Switch the Clifton Range Drying Oven on using the mains switch located top right hand side controls, the instrument will enter an auto diagnostics routine - if an error is found the instrument stops or an appropriate screen is shown.

Once the diagnostic procedure concludes, the display shows an operation status screen and
measurement of temperature, which is calibrated to show the actual temperature in the geometrical midpoint of the heating chamber.

The unit is inactive; nothing is running, display is just indicating chamber temperature with date and time information.

Note:
Only touch the control keys with your fingers adjusting settings, do not use pens, pencils or other tools. A beep can be heard confirming you have activated the key.

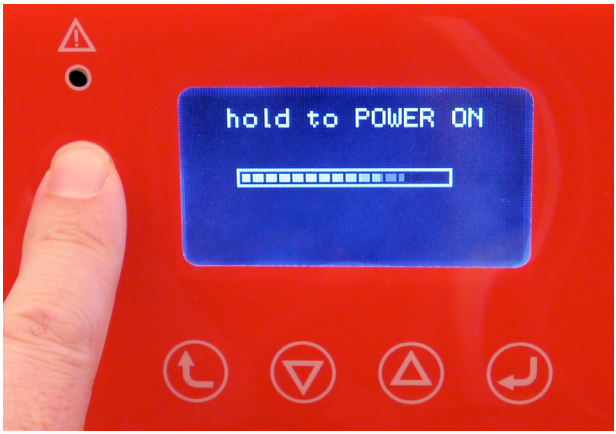
Standby mode

Touch the ON/OFF key and the unit enters standby mode, temperature display off, keypads illuminated.

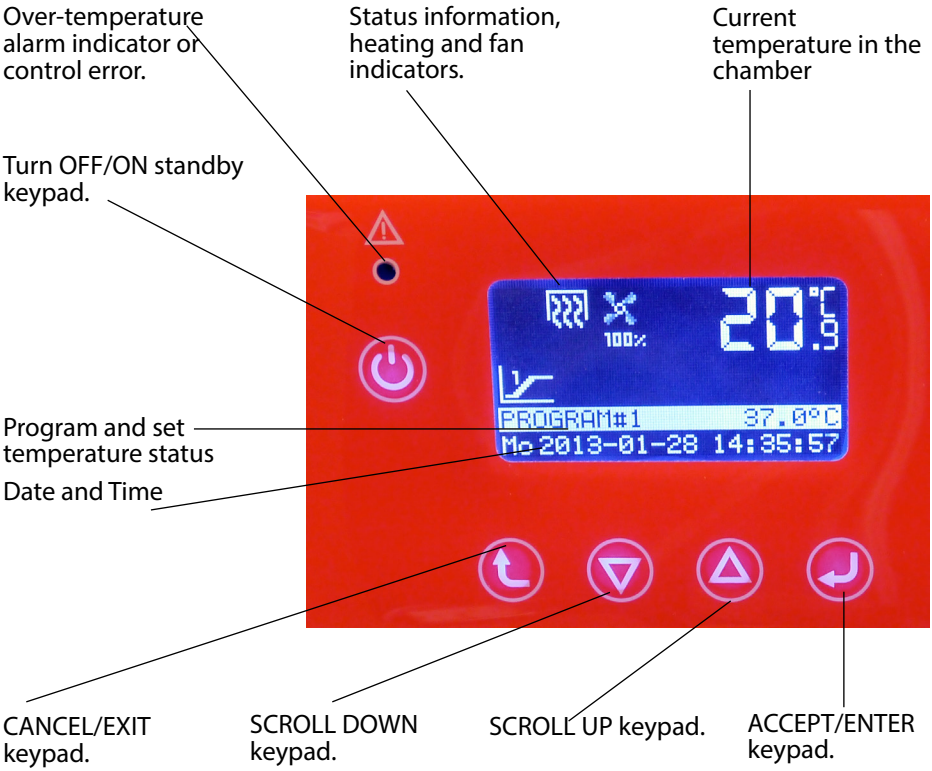
Resume from standby, touch the ON/OFF key and following the screen instruction.

If the unit is left unattended and not used, a clock face will appear in the display. Should it continue to be left unused it will enter standby mode, the keypads are illuminated and display is OFF, the keypads are locked.

Touch and hold CANCEL/EXIT key to unlock following on screen instruction.

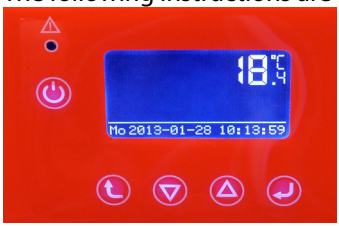


Controls Guide



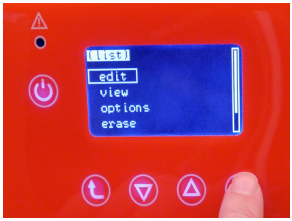
Editing and Setting the Temperature Program

The following instructions are for editing and setting the temperature.



Touch  and repeat  , then touch  or  to highlight "PROGRAMS", confirm

selection with  enter key.



Touch  to highlight "list", then  "Program1", then  "edit".

Touch  to edit "40.0" set temperature, the first digit "4" will flash on and off; adjust the value up or down using the arrow keys.

Touch  to edit the second digit "0" will flash on and off; adjust the value up or down

using the arrow keys. Touch  to enter and save the value.

Touch  to exit Program1, touch  to confirm and save changes.

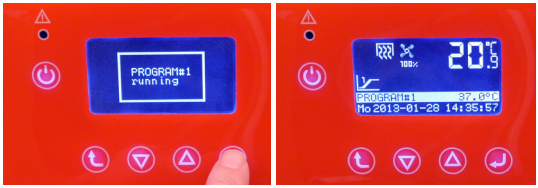
A protection screen appears should you need to set an alarm value. Otherwise it will automatically set a +5˚C alarm.

You can edit two further programs if required and store ready for use and selection.

Starting the Temperature Program

Touch  and repeat  , then touch  or  to highlight "Run", confirm selection with  enter. There are three options to choose from to run the program "immediately" start, "delay" start or "date time" to start. Touch  or  to select the option and then  enter.

- "Immediately" starting program option



Program1 status screen indicating set temperature, heating, fan speed and actual chamber temperature.

- "Delay" starting program day(s), hour(s), minute(s) in the future

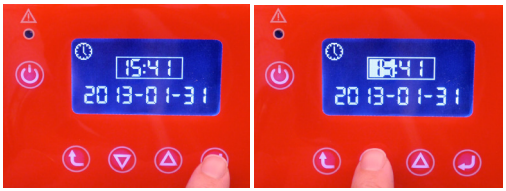
Touch  , to enter setting, border appears around 'dd:hh:mm' [day:hour:minute], touch  to highlight the day value 'dd', then touch either  or  to adjust and then

to acknowledge new hour value. Repeat to update hour and or minute setting as required

and touch to acknowledge.

Program1 running message appears, followed by status screen indicating when Program1 will start. An hourglass indicates Program1 is waiting to start.

- "Date time" starting program in the future, setting date and time



Touch , to enter settings, a border appears around time value 'hh:mm', touch to highlight the hour value 'hh', then touch either or to adjust and then to acknowledge new hour value.

Now 'mm' is highlighted, touch or to adjust highlighted 'mm', touch to acknowledge new minute value. With border around time touch to move border to

yyyy:mm:dd values, touch to highlight the year value 'yyyy', then touch either or to adjust and then to acknowledge new hour value and continue with 'mm'

month and 'dd' day values.

Program1 running message appears, followed by status screen indicating date and time when Program1 will start. An hourglass indicates Program1 is waiting to start.

Program running, controls locked

When any program is running the touch controls are locked, preventing accidental interruption or changes to incubator operation. To unlock follow on screen advice, touch  and hold until cleared.

<u>Stopping the program</u>

1. Touch  twice and "stop" appears in menu, touch  to confirm.

ALARM

If an alarm has been triggered a warning  triangle appears in top left hand display.

Touch  twice and you will enter the "events" log for information. To delete the alarm

touch  .

Logger

The “events” log automatically records events such as starting, stopping and ending a program, power on and power off, in chronological order. The second option “data” records temperature values when selected.
The following instructions are for accessing “events” log..

Touch and repeat , then touch or to highlight “LOGGER”, follow the

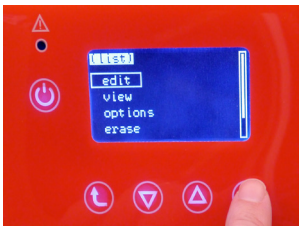
on screen menu guidance for “events” or “data”.

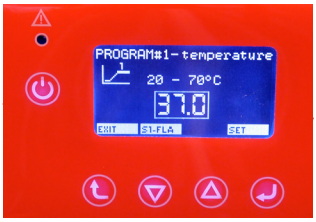
Editing and setting the exhaust air flap – factory pre-set 0%, closed

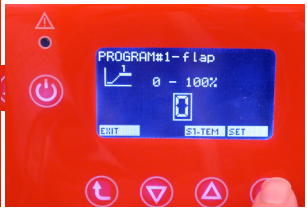
The following instructions are for editing and setting the exhaust, which allows air from the chamber to escape; settings 0% closed to 100% open. Recommend left closed at 0% c
losed. For instructions how to adjust:

Touch and repeat , then touch or to highlight “PROGRAMS”, confirm

selection with enter key.







Program screen appears, touch  underneath "S1-FLA", then  "set".

Touch  under "+" to increase or  "-" to decrease, then  "set",  to exit to "save changes?" acknowledge "yes" or "no".

Editing and Setting the Date and Time

The following instructions are for editing and setting date and time.

Touch  and repeat  , then touch  or  to highlight "SETUP", confirm selection with  enter key.

Touch  to highlight "Clock", then  , to enter clock settings. A border appears around time value 'hh:mm', touch  to highlight the hour value 'hh', then touch either  or  to adjust and then  to acknowledge new hour value.

Now 'mm' is highlighted, touch or to adjust highlighted 'mm', touch to acknowledge new minute value. With border around time touch to move border to

yyyy:mm:dd values, touch to highlight the year value 'yyyy', then touch either or to adjust and then to acknowledge new hour value and continue with 'mm'

month and 'dd' day values.

When changes have been completed touch and to exit.

Door Open

Open door: indication on display and audible beep.

When a program is running if the door is left open the red warning indicator will illuminate with audible beeping until the door is closed.

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 election 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.

10. The "swap out" service covers a loan unit being sent to the customer whilst the faulty unit is returned for repair (or replacement if necessary). A response to a customer request will normally be within 24 hours.

If equipment is returned and the fault is found to be due to misuse or abuse, this falls outside the terms of the extended warranty and therefore a quotation for the inspection and repair of the equipment will be issued prior to any work being carried out.

On return of the repaired equipment to the customer, it is the customer's responsibility to ensure that the loan equipment is returned in the same condition as it was received and if required decontaminated with a signed decontamination sheet enclosed with the instrument.

It is the customers responsibility to ensure that the loan equipment is packed in the packaging provided by Nickel Electro Ltd, in order that Nickel Electro Ltd can arrange collection of the loan instrument. If the loan instrument is not packed and ready for collection within 48 hours of a repaired instrument being returned to the customer, costs for collection and equipment rental fee will be applied.

Non Warranty Information:

Spare parts shall be made available for a period of 5 years after a piece of equipment is discontinued.

Nickel Electro Limited
Oldmixon Crescent
Weston Super Mare
North Somerset
BS24 9BL
United Kingdom

CE

EC Declaration of Conformity

We herewith confirm the following products:

NE7S SERIES OF COOLED INCUBATORS
NE8S SERIES OF INCUBATORS

Conforms with requirements outlined by the following European Directives:

Low Voltage Directive 2006/95/EEC
EMC Directive 89/336/EEC

We confirm the declaration:

Nickel Electro Limited
Oldmixon Crescent
Weston Super Mare
North Somerset
BS24 9BL
United Kingdom

Conforms with the requirements of the following standards:

BS EN 61010:1
BS EN 61010:2.010
Safety requirements for electrical equipment for measurement, control and laboratory use.
BS EN 61326
Electrical equipment for measurement control and laboratory use - EMC requirements.