

# GP RANGE, INCUBATORS AND OVENS USER MANUAL

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# **CONTROLS**

Your cabinet has been calibrated to UKAS traceable equipment. It is recommended that all cabinets are serviced and calibrated annually. Please call your supplier for details of preventative maintenance solutions, including calibration certificates.

# **WARNING LABELS USED**







Remove all connections to mains electricity before opening

# **OTHER LABELS**



This cabinet must disposed of in keeping with all relevant local legislation



This cabinet is CE marked. It is compliant with all relevant standards. More information is available on request

# SAFETY, CLEANING & OPERATING INSTRUCTIONS

#### **ELECTRICAL**

This is a Class 1 appliance.

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

GREEN & YELLOW = EARTH
BLUE = NEUTRAL
BROWN = LIVE

A fused mains plug or distribution board must protect this apparatus (maximum 13 amp fuse).

# THIS APPARATUS MUST BE EARTHED

#### FOR A COMPLETE ELECTRICAL DISCONNECTION PULL OUT THE MAINS PLUG

If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.

There are no user repairable parts inside - all repairs must be carried out by trained personnel

#### **CLEANING INSTRUCTIONS**

This is an electrical appliance. The chamber and outside cabinet should only be cleaned with a soft damp cloth when disconnected from the mains supply. Leave the door open to aid safe drying before switching the appliance on again. Do not use any harsh chemicals or abrasives.

#### **MAINTENANCE & REPAIRS**

It is good practice that this equipment receives a preventative inspection and calibration once annually by a qualified engineer. This is to ensure that the equipment is known to be calibrated, working correctly and is fit for purpose. Repairs must be by a qualified engineer. Please contact JIM Engineering to discuss this.

## **WARNING**

## THIS APPLIANCE MUST NOT BE USED IN VOLATILE ENVIRONMENTS

#### NOTE

This equipment must not be modified, altered or used for anything other than its intended purpose: The maintenance of safe products at a set temperature within the range of the cabinet, in a laboratory setting. Any use other than that stated, including (but not limited to) use with unsafe products or in an unsafe environment is entirely at the users risk and will invalidate the warranty.

### LIFTING AND MOVING

This equipment is heavy. You must use appropriate lifting and moving aids as well as more than one person. Do not lift by the door. If in doubt consult your Health & Safety or Estates department.

# **INSTALLATION / OPERATING INSTRUCTIONS**

- 1 Site the appliance on an even, level surface, or suitable stand.
- 2 Connect to the mains supply. Ensure that that the plug is accessible, so that it can be removed if necessary.
- 3 Turn on the mains power switch (the green power light will come on).
- 4 Ensure that the controller is set at the correct operating temperature and that the over-temperature protection is set approximately 3 °C above the set point. (see below for details on how to set the controls)
- 5 The cabinet is factory calibrated and will now warm to the desired temperature<sup>1</sup>. Once it has settled out, load the chamber as detailed below

# **Digital Controller:**

The upper display is the current temperature within the chamber. The lower display is the current operating temperature (set point).

# To change the set point (K49 Controller):

Press P. The screen will show SP 1 on the top line and the current set point on the bottom.

Use the  $\bigwedge$  and  $\bigvee$  buttons to set the new temperature as shown on the lower digits.

Press P again to confirm

# To change the set point (0316 / 3216 Controller):

Press and hold either the /\ or \/ buttons for a few seconds until the set point (lower number) begins to change

Adjust it to the required temperature and then Press no more buttons

After a few seconds the screen will flash and the new value is accepted

# To change the set point (EW4820 Controller):

Press P. The screen will show Set1 on the top line and the current set point on the bottom.

Use the  $\bigwedge$  and  $\bigvee$  buttons to set the new temperature as shown on the lower digits.

Press Set again to confirm

<sup>&</sup>lt;sup>1</sup> Some overshoot may occur if the set point is significantly different from the ambient temperature. This is normal during initial warming / cooling period after the cabinet is turned on. If the cabinet continues to operate outside of acceptable limits, call your supplier.

# To set the over-temperature protection:

Set the over-temperature protection device approximately 3 °C above the set point

- For cabinets with digital over-temperature protection. repeat the process above
- For cabinets with dial over-temperature protection, simply turn the dial to the correct position

NB. If the set point selected is very different from the previous one, it may take a few minutes for the cabinet to settle at the new temperature.

# LOADING INSTRUCTIONS

It is important that air flow is unrestricted.

Load the chamber evenly and do not over-fill the shelves as it can create a blockage between the fan and other areas of the chamber. This could cause the temperature stability to be impeded and may create uneven heating (warm / cold spots).

Items should not come within 50mm (approx 2 inches) of the fan duct, or be pressed against the walls blocking air from reaching all areas of the chamber.

If you experience a temperature control problem, empty the chamber and test it again before contacting your technician.

#### For cabinets with drip trays:

Ensure items are not placed at the edges of the shelf where they may drip down the side of the tray.

Do not place items directly on the tray as this may get hotter than the rest of the cabinet.

Remove the tray regularly to clean and ensure it does not overflow.

# TROUBLESHOOTING CHECKLIST

# No lights come on

- 1 Check that the power cable is securely plugged into the power socket and into the cabinet.
- **2** Check power switch and plug socket switch.
- 3 Try an alternative power cable.
- **4** Try an alternative plug socket.
- **5** Try another piece of equipment that you know works (eg. a desk lamp or a radio) in the same socket.
  - If this equipment also doesn't work, it is likely that there is a problem with the electricity supply. Call your electrician to investigate.
  - If it does work, but the cabinet still does not, call your supplier and explain what you have tried.

# Green power light comes on, but not the digital controller(s)

- 1 Check the status of the inline fuse for the controller(s) that is not working, replace with a direct equivalent if necessary
- 2 If there is still a problem, Note the model of the controller (it will be written on the corner of the face plate) and the serial number of your cabinet. Call your supplier and explain, quoting the controller model and serial number

# Heating light pulses or is on constantly, but the chamber remains too cool

- 1 Check the temperature of the chamber (the top line of the display)
- 2 Check the set point (the bottom line of the display)
  - Adjust set point if necessary and allow the cabinet time to settle.
- **3** Check that the overheat device is set above the controller set point and that the red light is not on.
  - Adjust the overheat device if necessary and allow the cabinet to settle.
  - If the dial is set correctly, but the red light is on, call your supplier and explain this.
- 4 Check that if the set point is significantly above room temperature, the cooling is not on
  - If the problem persists, call your supplier and explain this.

# Cooling is switched on, but chamber remains too warm

- 1 Check that the room temperature is not more than 15 °C above the set point.
- 2 Check that the fan inside the chamber is working and that air is moving freely around the cabinet.
  - If the problem persists, make a note of the settings and the current chamber temperature, call your supplier and explain this.

Any repairs or replacements of parts must be performed by a competent person.

