



Tanhouse Lane, Riverview Industrial Estate
Widnes, Cheshire WA8 0SR England
Tel: 0151 424 5001
Fax: 0151 495 2197
Web site: www.genlab.co.uk
E-mail : enquiries@genlab.co.uk

OPERATING INSTRUCTIONS HDO, PWO & VLCO INDUSTRIAL OVENS

1. MAINS SUPPLY

- 1.1 Check the voltage and load as shown on the Serial Plate located on the back of the unit.
- 1.2 Connect the mains lead via a suitable triple pole and neutral switch fuse as follows. Connections are:

BROWN	Phase 1
BLACK	Phase 2
GREY	Phase 3
BLUE	Neutral
GREEN/YELLOW	Earth

Please note:

Ensure that after the electrical connections have been made, the fan blades rotate in a clockwise direction as viewed from inside the chamber. It may be necessary to change phases to achieve this. (Anti Clockwise External)

2. OPERATION

- 2.1 Position the shelves in the work chamber. Switch ON via the panel isolator switch (green lamp indicates power on).
- 2.2 Set the Overheat Controller to 10°C above the desired working temperature. ***For Digital Overheat R38*** :- Press the " ▼ " button once to see the target temperature " SP1", then use the " ▲ " or " ▼ " or down buttons to alter the set point. Press the 'P' button to accept the change. The display will revert back to actual temperature if no buttons are pressed for approximately 10 seconds.
- 2.3 If a secondary overheat is fitted set this to 10°C above the top temperature that you will be using the unit at.
- 2.4 Set the main temperature controller to the desired temperature by pressing " ▼ " button once to show "SP1" then use " ▲ " or " ▼ " buttons to alter the set point. Press the 'P' button again to accept the change. The display will revert back to the normal display if no button is pressed for approximately 10 seconds. The operational parameters of the controller have been factory set to cover a wide range of temperature and load conditions
Note: Top display shows actual temperature and bottom display shows set temperature

- 2.5 With the doors in the closed position turn the on/off control switch to the on position. Press the alarm reset button and then the start button to start the fans and heating.
- 2.6 Units fitted with **programmable or other controller**. (Eurotherm, West, Cal etc.)
Set the controller as described in the manufacturers' instruction booklet supplied.
- 2.7 Units fitted with **24 hour time switch / 7 day timer**.

Analogue / Mechanical

Set the clock by turning the dial to the right until the correct time is above the red arrow. Insert the pins into the holes in the dial for the on/off times required. The inner ring is the ON time, the outer ring the OFF time. When the time off is reached, the unit heaters will be turned off.

(make sure the door(s) is closed, the control panel on-off switch is on and the heat process start button has been pressed)

7 Day Digital Time (Time Guard)

Please read manufactures book on how to program.

The center switch has 3 positions ON-OFF-TIMED

In the ON position the oven operates as normal.

In the OFF Position the oven controllers work but no heat or fans.

In the TIMED position the oven will come on and go off with the timer program.

Note: Please ensure the control panel on/off switch is set to on, the alarm reset and Heat Process Start has been pressed for the timer to work.

- 2.8 Units fitted with **Process Timer** (run-back at temperature)

TT 34 (99.99hour)

Programming of timer

Press 'P' for 1 sec till 'T1' appears.

Release and the adjustable time appears.

Press up or down to adjust

Set the MAN TIM switch to TIM.

Press the reset.

Press the alarm reset

Press the Heat Process Start

The timer will start timing down when the chamber reaches the set temperature

When the timer reaches 0 the heat will switch off and the Process Complete will illuminate.

- 2.9 Units fitted with external fan speed control
The fan motor speed control is situated beneath control cabinet emergency stop.
It is pre-set to 45Hz but can be set to a
maximum 50Hz (100%) = 1400rpm
minimum 20Hz (40%) = 560rpm
To adjust the speed:-

- With the control panel switched turned on.
- Rotate " Ⓞ " clockwise or anticlockwise to increase or decrease the speed.

- Press the Set button to accept the change
- Speed is indicated in Hz

3. PREVENTATIVE MAINTENANCE

Ensure that the unit is maintained in a clean dry condition and when not in use, stored in a normal warm atmosphere.

Minimum recommendations every six months:-

- 3.1 Check the operation of the overheat protection.
- 3.2 Carry out an electrical safety check (Portable Appliances) using an appropriate appliance tester operated by a competent person.
- 3.3 Check that the control temperature is maintained within limits.

The manufacturer can offer the above service on request.

4. MAINTENANCE

BEFORE STARTING WORK, ISOLATE THE UNIT FROM THE MAINS SUPPLY

- 4.1 To check or replace any electrical components, first remove the right hand side panel where the fan motor, element connections, control circuitry, circuit breaker, solid state relay and overheat relay are situated.

To avoid the danger of electric shock, after completion of any maintenance work and before replacing the covers and switching the unit back on, check carefully that any wiring which may have been disturbed, either accidentally or deliberately, is correctly connected.

5. GENERAL

- 5.1 Take the normal precautions not to allow water to come into contact with the electrical components.
- 5.2 The outer surfaces and work chamber may be cleaned with a warm damp soapy cloth or any proprietary cleaner suitable for a painted surface. Do not use harsh abrasives or solvents on the painted surface.