

**30DSERIES**

**turbofan<sup>®</sup>**

**E31D4**  
(Digital Operation)

Installation and Operation Manual

**turbofan**  
CONVECTION OVEN SYSTEMS

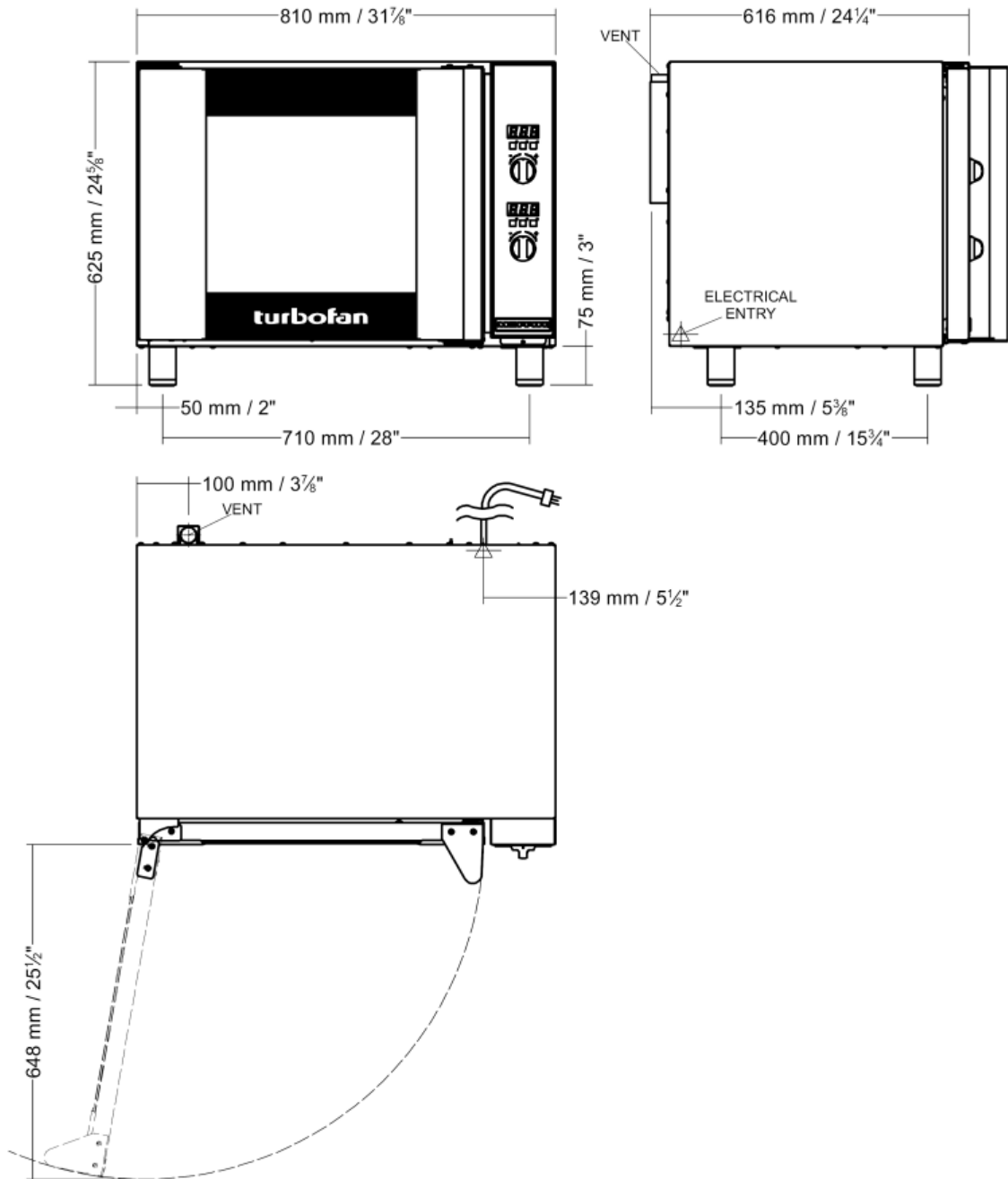
**MOFFAT<sup>®</sup>**

**BLUE SEAL<sup>®</sup>**

234144-2

# Specifications

## E31D4



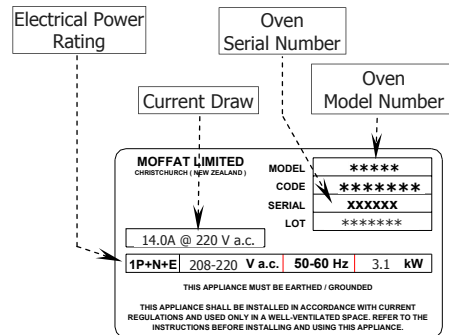
Oven Power Ratings				Oven Tray Details	
				Tray Capacity	Tray Spacing
208V,	1P+N+E,	50/60HZ,	2.9 kW	4 x GN 1/1 Pan 4 x US 1/2 Pan	85 mm / 3 1/3"
220V,	1P+N+E,	50/60HZ,	3.1 kW		
230-240V,	1P+N+E,	50/60HZ,	3.1 kW		

# Installation

## Installation Requirements

### **Important:**

- Installation shall comply with local electrical, health and safety requirements.
- It is most important that this oven is installed correctly and that oven operation is correct before use.
- If you have any questions regarding the proper installation and / or operation of this oven, please contact your local Turbofan distributor.



Technical Data Plate - Data and Location (example only)

## Unpacking

1. Remove all packaging and transit protection including all protective plastic coating from the exterior stainless steel panels.
2. Check the oven and supplied parts for damage. Report any damage immediately to the carrier and distributor.
3. Check that the following parts have been supplied with your oven:-
  - 4 x Leg Adjustable.
4. Report any deficiencies to the distributor who supplied your oven.
5. Securely fit the 4 legs supplied with the oven.
6. Check that the available electrical supply is correct to that shown on the Technical Data Plate located on the front right hand side panel.

- Refer to 'Specifications' section, 'Oven Specifications Tables'.

## Location

1. Position the oven in its approximate working position.
2. The unit should be positioned so that the control panel and oven shelves are easily reachable for loading and unloading.

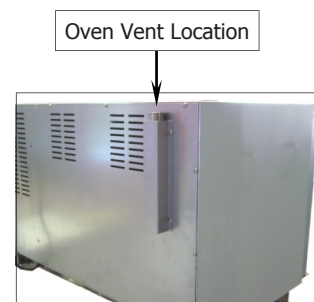
## Clearances

To ensure correct ventilation for the motor and controls, the following minimum installation clearances are to be adhered to:-

Top	200 mm / 8".
Rear	75 mm / 3".
Left-hand side	75 mm / 3".
Right-hand side	75 mm / 3".

### **Important:**

The vent located at the rear of the oven must NOT be obstructed.



## Stand Mounted Ovens

For ovens that are to be mounted to a stand, the oven feet are used to level the oven on the stand. Refer to the instructions supplied with separately ordered stands for mounting details.

# Installation

## Electrical Connection



### Warning

This oven must be earthed / grounded.

If the supply cord is damaged, it must be replaced by a suitably qualified person in order to avoid a hazard.

Each oven should be connected to an adequately protected power supply and an isolation switch mounted adjacent to, but not behind the oven and must be readily accessible to the operator. This switch must be clearly marked and readily accessible in case of fire.

Check the electricity supply is correct to as shown on the Technical Data Plate on the front right hand corner of the oven side panel.

Ensure that the oven is fitted with the appropriate power cord and plug.

## Positioning and Levelling of Oven

1. Correctly locate the oven into its final operating position and using a spirit level, adjust the oven feet so that the oven is level and at the correct height.

## Initial Start-Up

Before using the new oven;

1. For first time use of the oven, operate the oven for about 1 hour at 200°C / 400°F to remove any fumes or odours which may be present.
2. Please refer to the Operation Section of this manual for details on how to correctly operate and shutdown the oven.

## Commissioning

Before leaving the new installation;

Check the oven functions in accordance with the operating instructions specified in the 'Operation' section of this manual.

Ensure that the operator has been instructed in the areas of correct operation and shutdown procedure for the appliance.

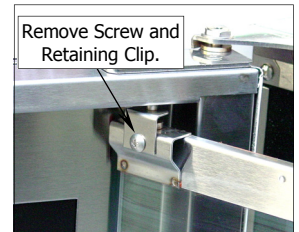
**NOTE:** If for some reason it is not possible to get the appliance to operate correctly, turn off the power supply at the mains supply and contact the supplier of this appliance.

## Reversing the Oven Door

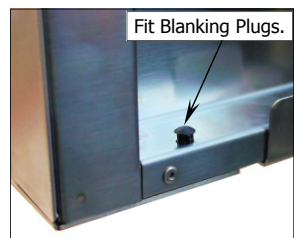
**NOTE:** This operation should only be carried out by a suitably competent person.

### Remove the Oven Door Inner Glass.

1. Open the oven door and open the door inner glass.
2. Remove the screw securing the inner glass retaining clip and remove the clip.
3. Lift up the inner glass and remove, ensuring that the pivot spacer is removed from the lower inner glass pivot and retained.

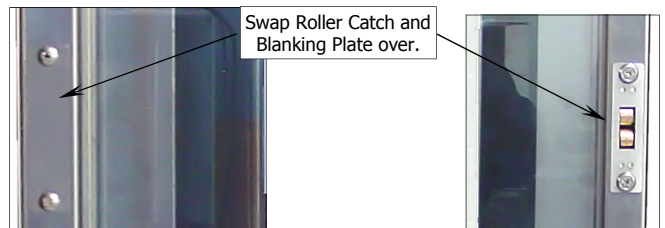


4. Remove the black plastic plugs from the top and bottom of the door and fit to the holes where the inner glass pivots were removed from.

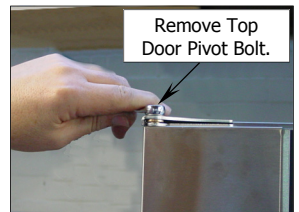


### Remove the Oven Door.

5. Remove the door roller catch and blanking plate from the inside of the door and swap these over.



6. Whilst supporting the door, unscrew and remove the top door pivot bolt from the top door hinge assembly.
7. Remove the door and lay on a flat surface or workbench.



8. Unscrew the screws securing the door handle and remove the door handle.

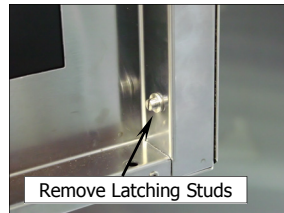


9. Remove the top door hinge and fit to the bottom opposite corner of the door.
10. Remove the bottom door hinge and fit to the top opposite corner of the door.



# Installation

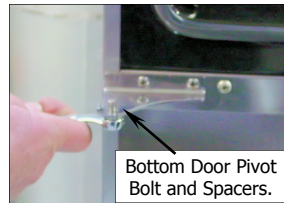
11. Remove the inner glass latching studs and fit to opposite side of door using Loctite 243 to secure.



12. Turn the door handle over and fit to the other end of the door where the hinges were removed from. Ensure Flat of handle is to the outside.

## Remove the Upper and Lower Door Hinges and Door Catch.

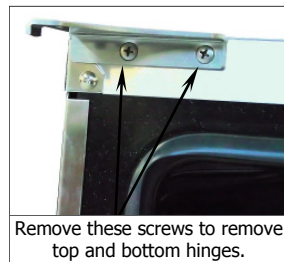
13. Remove the bottom door pivot bolt and spacers and fit the pivot bolt to the top door hinge assembly (as this will be swapped over and fitted to the bottom of the other side of the oven).



14. Remove the 4 blanking screws from the front of the oven.

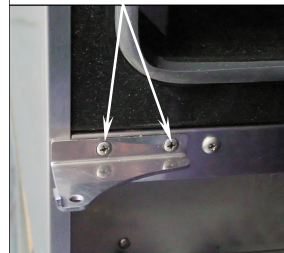


15. Remove the Hinge Plate from the top of the oven and fit diagonally opposite, to the lower corner.

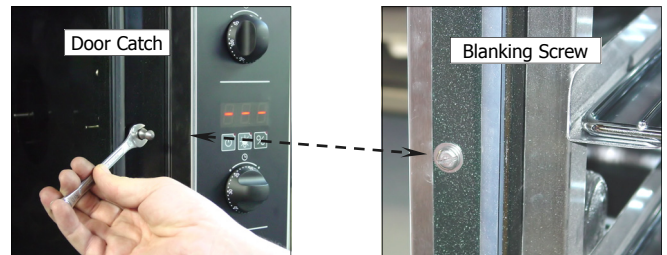


16. Remove the Hinge Plate from the bottom of the oven and fit diagonally opposite, to the upper corner.

17. Fit the screws removed at Item 14 above to where the hinges were fitted.



16. Remove the Blanking Screw and Door Catch from the front of the oven and swap around.

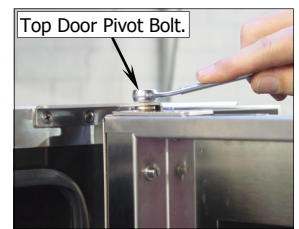


17. Fit the door spacers removed at Item 13 opposite to the lower hinge pivot bolt.

## Oven Door Re-Fitting

### Fit the Door.

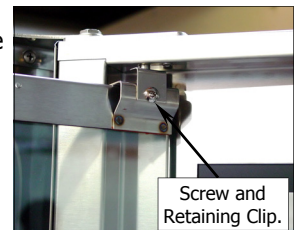
1. Refit the oven door by locating the bottom of the door onto the bottom hinge plate pivot bolt and spacers.
2. Fit the top of the door into the top hinge plate and secure with the top pivot bolt.



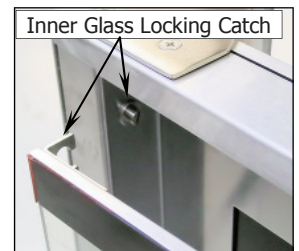
### Fit Inner Glass to Door.

**NOTE:** It is important to ensure that the inner glass is fitted correctly and that the glass pivots at the hinge end of the door and not the handle end.

3. Fit the pivot spacer removed at Item 3 on the previous page, to the lower inner glass pivot and locate the inner glass lower pivot into position on the inside of the door.
4. Locate the top pivot of the inner glass into the top of the door and secure in position with the inner glass retaining clip.



5. Lift the inner glass up onto the locking catch to lock into position.



### Adjust the Door for Correct Alignment.

Check the operation of the door. Ensure that the door roller catch correctly retains the door in the closed position.

To adjust, slightly loosen the screws securing the roller catch and close the door. The roller catch will centralise itself. Open the door and tighten the roller catch securing screws.

# Operation

## Operation Guide



### Warning

Some parts of this oven will become **VERY HOT** during use and could cause burns if touched.

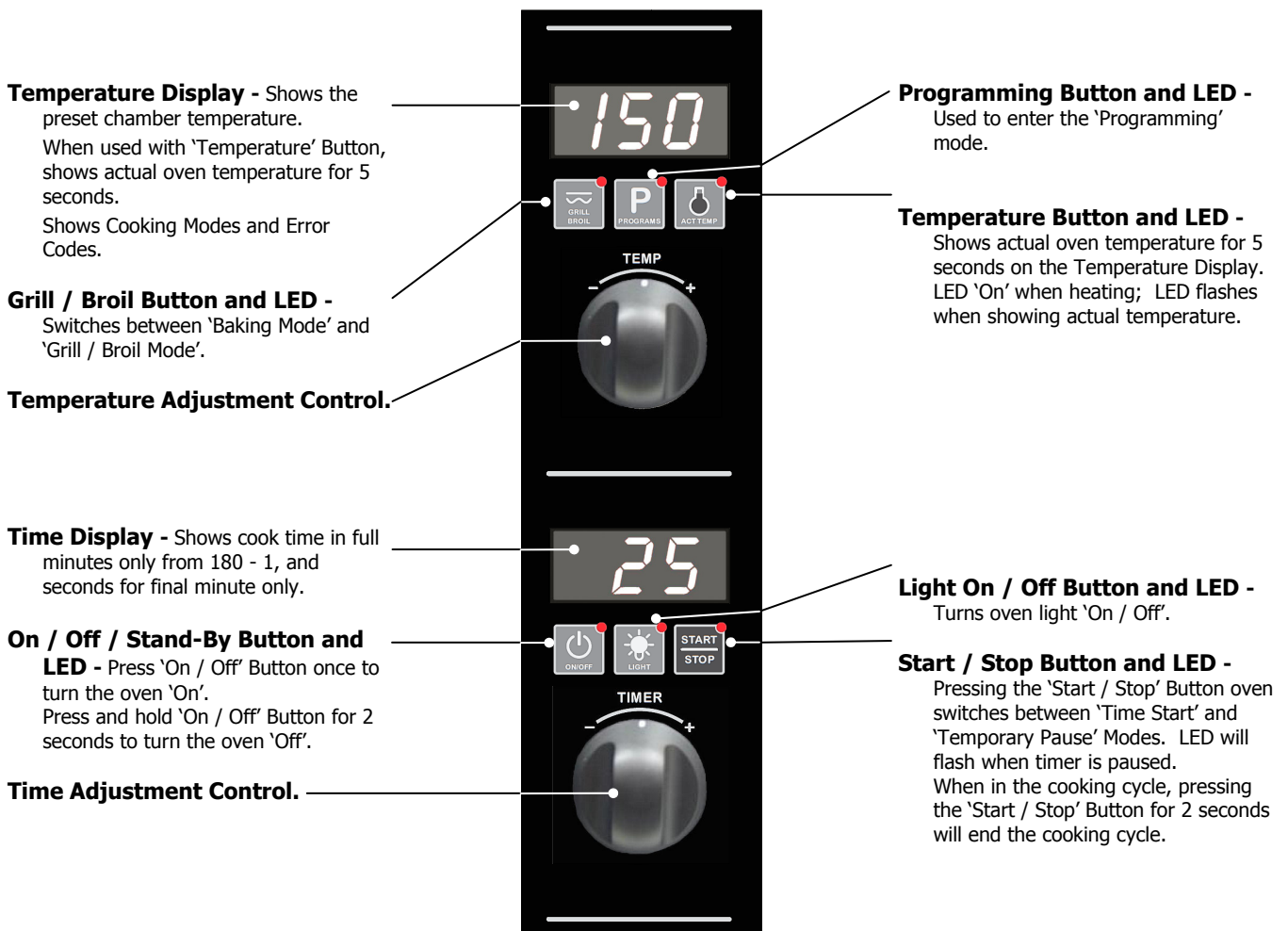


### Warning

Take care when opening the oven door during baking. Let hot air and steam escape before removing or replacing food as the steam produced can cause steam burns.

- Turbofan Ovens have been designed to provide simple operation.
- This oven is intended for use in a commercial kitchen and must only be put to the use for which it was intended, i.e. cooking food product. To use this oven correctly please read the following sections carefully:-

## Oven Control Panel



## Starting the Oven

1. Turn 'On' electrical power to the oven. The controller will carry out a self check of the LED's.
2. Press the 'On/Off' Button.
3. The Heating Indicator will illuminate.

## Oven Shut-Down

1. To turn 'Off' the oven, press and hold the 'On/Off' button for 3 seconds, the oven controller will go to 'Stand-By' mode.

# Operation

## Using the Oven - Manual Mode

### 1. TURN 'ON'.

Press 'On-Off' button.



### Temperature Display.

Temperature Display will show actual temperature.

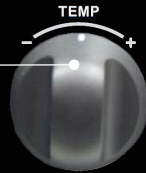
150

To check actual oven temperature during preheat or cooking, press 'Temperature' button. Actual temperature will display briefly on 'Temperature Display' before the display reverts to the pre-set temperature.

Heating 'On' Indicator

### 2. SET TEMPERATURE.

- + to increase the temperature.
- to decrease the temperature.



At any time during cooking, time and temperature can be adjusted by using the 'Time' / 'Temperature' controls.

### Time Display.

Time Display will show actual time set.

25

Timer 'On' Indicator

Power 'On' Indicator

### 3. SET TIME.

- + to increase the time.
- to decrease the time.



This oven can be used without using the 'Timer', as it is purely a timer and does not control the baking operation of the oven.

### 4. START TIMER.

Press 'Start / Stop' button to start timer operation.



If the 'Timer' is set to the 'Infinity' setting **inf**, the timer will count elapsed time to a maximum of 999 minutes.

- Press any button, to cancel the 'Alarm'.

Opening the oven door during a cooking cycle will pause the cooking time. To continue cooking, close the oven door.



- Press 'Grill / Broil' button, to select the Grill / Broil mode.



- Press 'Act Temp' button, to check 'Actual' temperature of oven at any time during cooking.



- Press 'Light' button, to turn 'On' oven light. (refer - 'Operator Accessible Parameters').



- Press 'Program' button, to program the Oven refer to the 'Installation and Operation Manual'.



- Press and hold 'On / Off' button, for 3 seconds to turn 'Off' the Oven.

**Grill / Broil;** - Grill / Broil function can be selected at any time during the Manual Mode by pressing the 'Grill / Broil' button. The 'Grill / Broil' LED will illuminate.

The Time Display will show either 'Grill' **grL** or 'Broil' **brL**.

On completion of the Grill / Broil mode, the oven temperature will return to the temperature previously set.

# Operation

## Cooking in Program Mode

### 1. TURN 'ON'.

Press 'On-Off' button.



Press 'Programs' button.



#### Temperature Display.

Temperature Display will show program selected.

### 2. SELECT A PROGRAM.

+ to scroll forward through programs.  
- to scroll backward through programs.

#### Time Display.

Time Display will show 'Pre-Heating'.  
Program cannot be started until pre-heating is completed.

#### Load Oven.

'Time' display will show 'Ready'.



### 3. START PROGRAM.

Press 'Start / Stop' button to start cooking program.



Program Mode Indicator

Heating 'On' Indicator

To check actual oven temperature during preheat or cooking, press 'Temperature' button. Actual temperature will display briefly on 'Temperature Display' before the display reverts to the pre-set temperature.

When cooking in 'Program' mode, the oven light will remain 'On' until cooking is completed.

Opening the oven door during a cooking cycle will pause the cooking time. To continue cooking, close the oven door.

- **Press any button**, to cancel the 'Alarm'.



- **Press 'Grill / Broil' button**, to select the Grill / Broil mode.



- **Press 'Act Temp' button**, to check 'Actual' temperature of oven at any time during cooking.



- **Press 'Program' button**, to program the Oven refer to 'Setting the Oven Programs' overleaf.



- **Press and hold 'On / Off' button**, for 3 seconds to turn 'Off' the Oven.

**Grill / Broil;** - Grill / Broil function can be selected at any time during the Program Mode by pressing the 'Grill / Broil' button. The 'Grill / Broil' LED will illuminate.

The Time Display will show either 'Grill' **grL** or 'Broil' **brL**.

On completion of the Grill / Broil mode, the oven temperature will return to the temperature previously set.



# Operation

## Setting the Oven Programs

Oven can be pre-programmed with up to 20 Program's. When you receive your oven, the controller is not programmed. To set programs, carry out the following for each program required:-

### 1. ENTER PROGRAMMING MODE.

Press 'Programs' button to enter 'Programming' mode.



### 2. SELECT PROGRAM REQUIRED.

Rotate 'Temperature Control' to program required.  
Temperature Display will show program selected.

Press and hold 'Temperature' button until 'Time' and 'Temperature' displays and 'Temperature' button LED flashes.



Change time and temperature parameters.

### 3. ENTER COOK TEMPERATURE.

Rotate 'Temperature Control' to set cook temperature.  
+ to increase the temperature.  
- to decrease the temperature.

'Temperature' Display will show temperature selected.



### 4. ENTER COOK TIME.

Rotate 'Timer Control' to set cook time.  
+ to increase the time.  
- to decrease the time.

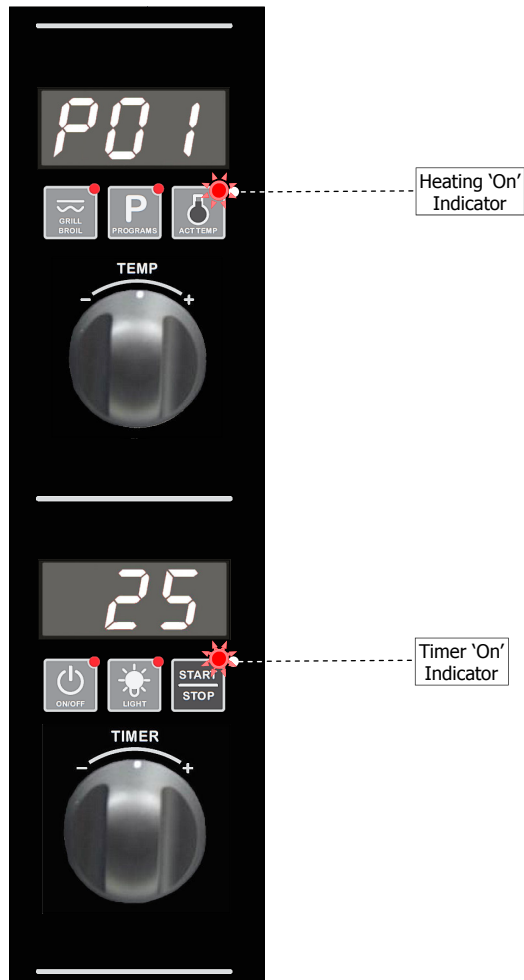
'Time' Display will show time selected.



'Time' and 'Temperature' displays and 'Temperature' button LED flash.



Press 'Temperature' button to confirm 'Time' and 'Temperature' settings.



# Operator Accessible Parameters

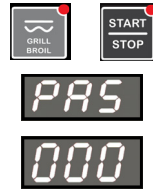
## Setting the Operator Accessible Parameters

### 1. ENTER THE OPERATOR PARAMETER MODE.

Press 'Grill / Broil' and 'Start / Stop' buttons together.

'Temperature' Display will show 'PAS'.

The 'Time' Display will flash.



### 2. SET PASSWORD.

Rotate 'Timer Control' to set password;  
(123) (Operator Password).

Press 'Light On / Off' button to confirm password.

'Temperature' Display will show one of Parameter Codes.

'Time' Display will show value of the parameter.



### 3. SETTING THE PARAMETERS.

Rotate 'Timer Control' to parameter required.

Press 'Light' button to confirm parameter. 'Time' display will flash.

While 'Time' display is flashing, rotate 'Timer Control' to select value required.

Press 'Light' button to confirm value. 'Time' display will stop flashing.



### 4. EXITING THE PARAMETER MODE.

Press 'On-Off' button, to return to 'Stand-By' mode.

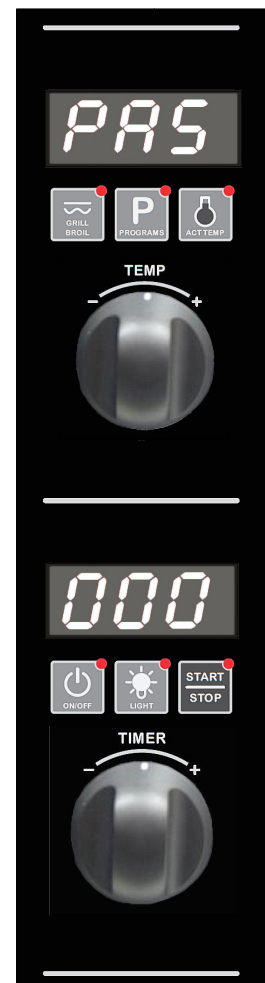


Table of Operator Accessible Parameters

Parameter Number.	Description	Default Setting
	Turn -On Pre-Heating Temperature. (60 - 260°C / 140 - 500°F).	150
	Light Auto 'Off' Setting Time - 0 = 'On/Off'. 1 = 1 minute auto 'Off'. 2 = 2 minutes auto 'Off', etc.	1
	Buzzer Volume - Can be adjusted from '0' to '10'.	5
	Program Pre-Heating Condition - (Can be adjusted from 0 to 30 degrees above pre-heat temperature).	10