



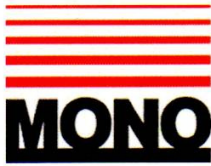
[www.monoequip.com](http://www.monoequip.com)

Enter **Serial No.** here. \_\_\_\_\_

In the event of an enquiry please quote this serial number.




# OPERATION AND MAINTENANCE MANUAL **LED (CLASSIC) DECK OVEN**



## DECLARATION OF CONFORMITY

We hereby declare that this machine complies with the essential health and safety requirements of :-

- The Machinery Directive 2006 / 42 / EC
- The Low voltage Directive 2014 / 35/ EC
- The requirements of the Electromagnetic Compatibility Directive 2004 / 108EC, 91 / 263 / EEC, 92 / 31 / EEC  
Incorporating standards  
EN55014-1:2006+A1:2009+A2:2011  
EN55014-2:1997+A1:2001+A2:2008
- The General Safety of Machinery and food processing Standards applicable
- Materials and Articles intended to come into contact with food Regulation (EC) No. 1935 / 2004

<b>Signed</b>	
G.A. Williams – Quality Manager	

<b>Date</b>	
-------------	--

<b>Machine FG Code.</b>		<b>Machine Serial No.</b>	
-----------------------------	--	-------------------------------	--

A technical construction file for this machine is retained at the following address:

**MONO EQUIPMENT**  
Queensway,  
Swansea West Industrial Park,  
Swansea  
SA5 4EB  
UK

**MONO EQUIPMENT** is a business name of **AFE GROUP Ltd**  
Registered in England No.3872673 VAT registration No.923428136

Registered office: Unit 9, Bryggen Road,  
North Lynn Industrial Estate,  
Kings Lynn,  
Norfolk,  
PE30 2HZ

**Failure to adhere to the cleaning and maintenance instructions detailed in this booklet could affect the warranty of this machine.**

# CONTENTS

---

<b>Section - 1.0</b>	<b>Introduction</b>
<b>Section - 2.0</b>	<b>Overall Dimensions</b>
<b>Section - 3.0</b>	<b>Specifications</b>
<b>Section - 4.0</b>	<b>Safety</b>
<b>Section - 5.0</b>	<b>Installation</b>
<b>Section - 6.0</b>	<b>Isolation</b>
<b>Section - 7.0</b>	<b>Cleaning</b>
<b>Section - 8.0</b>	<b>Operating Conditions</b>
<b>Section - 9.0</b>	<b>Principles Of Operation</b>
<b>Section - 10.0</b>	<b>OPERATING INSTRUCTIONS</b>
<b>Section - 11.0</b>	<b>Troubleshooting</b>
<b>Section - 12.0</b>	<b>Service and Spares</b>
<b>Section - 13.0</b>	<b>Spares Information</b>
<b>Section - 14.0</b>	<b>Electrical Information</b>

# 1.0 INTRODUCTION ---

The **MONO Electric Deck** Oven is an easy to use practical, good-looking oven giving an excellent heat recovery rate and an even bake across a wide range of bread and confectionery products.

- **Good looking and totally reliable**

Conceived with the no nonsense requirements of both the independent and in-store baker in mind, and designed to visually please as well as give reliable service for many years, this oven will more than satisfy the most discerning customer.

- **Top quality specification**

The external and internal contact surfaces are stainless steel, so there's no fear of deterioration even after many years of hard use; plus each deck is fitted with baking sheets manufactured from natural materials as a standard fitting.

The oven comes with an integral steaming system resulting in a reduction in energy consumption and also a reduction in the overall size of the oven. The system produces real steam and because rapid recovery has been designed into the oven you can enjoy it time and time again.

Fitted with hinged easy to clean doors, individual top and bottom heat controls and seven day bake timers for each deck, the oven gives the Master Baker a fast, even bake.

- **Clean design, easy to maintain**

Supplied with an LED screen. All programmable parameters have separate indicators for easy programming and extra bake time, if required.

An energy saving 7-day timer is also standard.

The simplified electrical circuits aid reliability with overheat protection (on controllers and oven) to ensure long life of controllers, all housed in splash-proof electrical enclosures.

An "i" button can be used to upgrade firmware without the need of dismantling the panels.

## 2.0 OVERALL DIMENSIONS

---

### **5 DECK 3 TRAY**

HEIGHT 2040MM

WIDTH 1890MM

DEPTH 1120MM

---

### **5 DECK 2 TRAY**

HEIGHT 2040MM

WIDTH 1410MM

DEPTH 1120MM

### **4 DECK 3 TRAY**

HEIGHT 1890MM

WIDTH 1890MM

DEPTH 1120MM

---

### **4 DECK 2 TRAY**

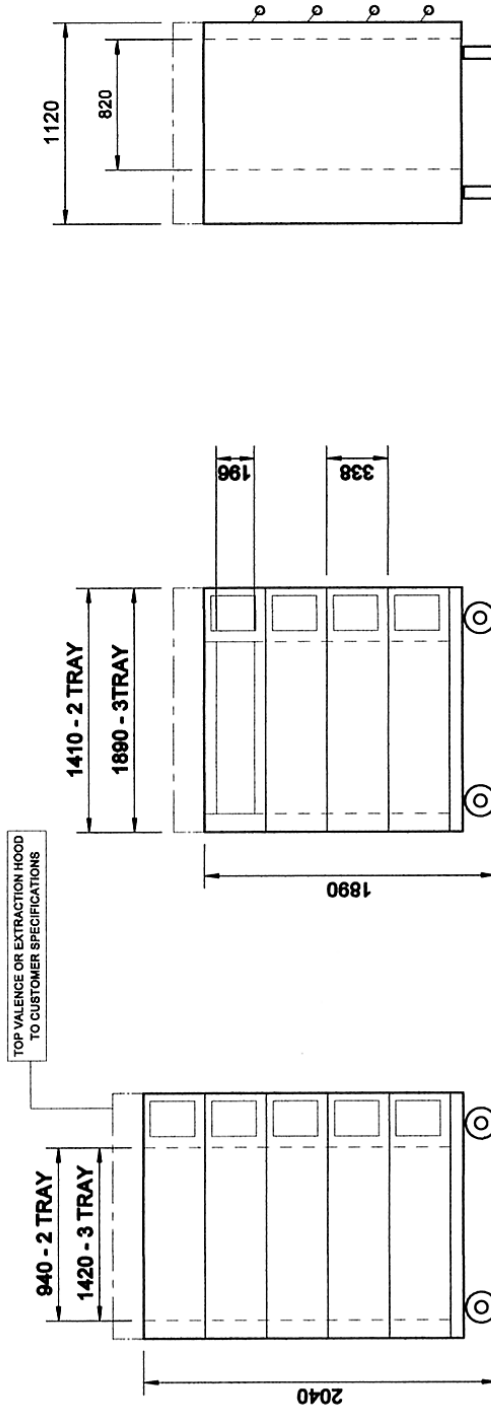
HEIGHT 1890MM

WIDTH 1410MM

DEPTH 1120MM

# 3.0 SPECIFICATIONS

NOISE LEVEL: Less than 80 dB



SIDE VIEW

4 DECK

5 DECK

NOMINAL TRAY WIDTH	EXTERNAL AREA	POWER Kw (PER DECK)		VOLTAGE AS REQUIRED IN THE COUNTRY OF USE	INTERNAL SURFACE AREA	No. OF TRAYS (per deck)
		5 DECK	4 DECK			
3 tray	2.12Mtr <sup>2</sup>	8.24	8.24		1.1Mtr <sup>2</sup>	600 X 800 600 X 400 18" x 30" (457 X 780) 18" x 28" (457 X 680)
2 tray	1.58Mtr <sup>2</sup>	NOT AVAILABLE	NOT AVAILABLE		0.7Mtr <sup>2</sup>	600 X 800 600 X 400 18" x 30" (457 X 780) 18" x 28" (457 X 680)

## MONO DX11 OVEN RANGE

## 4.0 SAFETY

---

- **All maintenance must be made with the oven disconnected from the power supply and then only by fully trained authorized persons.**
- Check all cover panels, and any pipe fittings are securely positioned.
- Check oven door handles are not damaged.
- Do not operate a deck's steaming system with oven door open.
- Always use oven gloves when loading the oven.
- When products are removed from the oven, ensure:
  - (a) Tins are knocked out and stored directly onto a tin storage trolley or rack (Do not leave hot tins on the floor or on tables).
  - (b) Trays are put into a rack and the rack is wheeled to a safe cooling area.
- Do not store items on top of the oven.
- Do not store items behind the oven.
- Beware of hot surfaces. Do not touch oven front or door with bare skin.
- All operatives must be fully trained
- People undergoing training must be under direct supervision
- The oven should only be used for baking bread, pastries and cakes (for other products please contact **MONO** Equipment)
- No unauthorized modifications should be made to the oven.
- Do not walk on the roof of the oven
- **DISPOSAL**  
Care should be taken when the oven comes to the end of its working life. All parts should be disposed of in the appropriate place either recycling or other means as the law permits at the time.

**NOTE: BAKERY STAFF MUST NOT UNDER ANY CIRCUMSTANCES REMOVE PANELS TO ACCESS ANY PART OF THE DECK OVEN. Panels should only be removed by a MONO maintenance engineer (or other fully trained maintenance contractor) for repairs or maintenance, after isolating oven from power supply.**

**NOTE: THE BAKERY MANAGER OR THE BAKERY SUPERVISOR MUST CARRY OUT THE ABOVE DAILY SAFETY CHECKS**



## 5.0 INSTALLATION

---

### GENERAL

- A smooth level floor is recommended on which to position the oven and access for maintenance should be considered.
- It is recommended that an extraction hood be placed above the oven to disperse excess steam, plus heat which could have an adverse effect on the bakery ceiling and ambient temperature.
- It is recommended that a minimum gap of 75mm be left on the right hand side of the oven to allow maximum cooling of the electrical chamber.
- Installation must be made by a trained authorized engineer.
- **The oven must be “run in” as stated in the initial start up instructions.**

### WATER SUPPLY

- All ovens with steam require a 15mm water supply at a pressure of 2 - 3 bar. standard domestic water supplies are usually within these parameters. All connections should comply with local water regulations.
- No drain is required for this oven.
- Customers are strongly advised to fit a water treatment device to all bakery equipment requiring water. **MONO** can advise on a suitable water treatment unit. This is essential in hard water areas.

### WATER SYSTEM SETUP PROCEDURE.

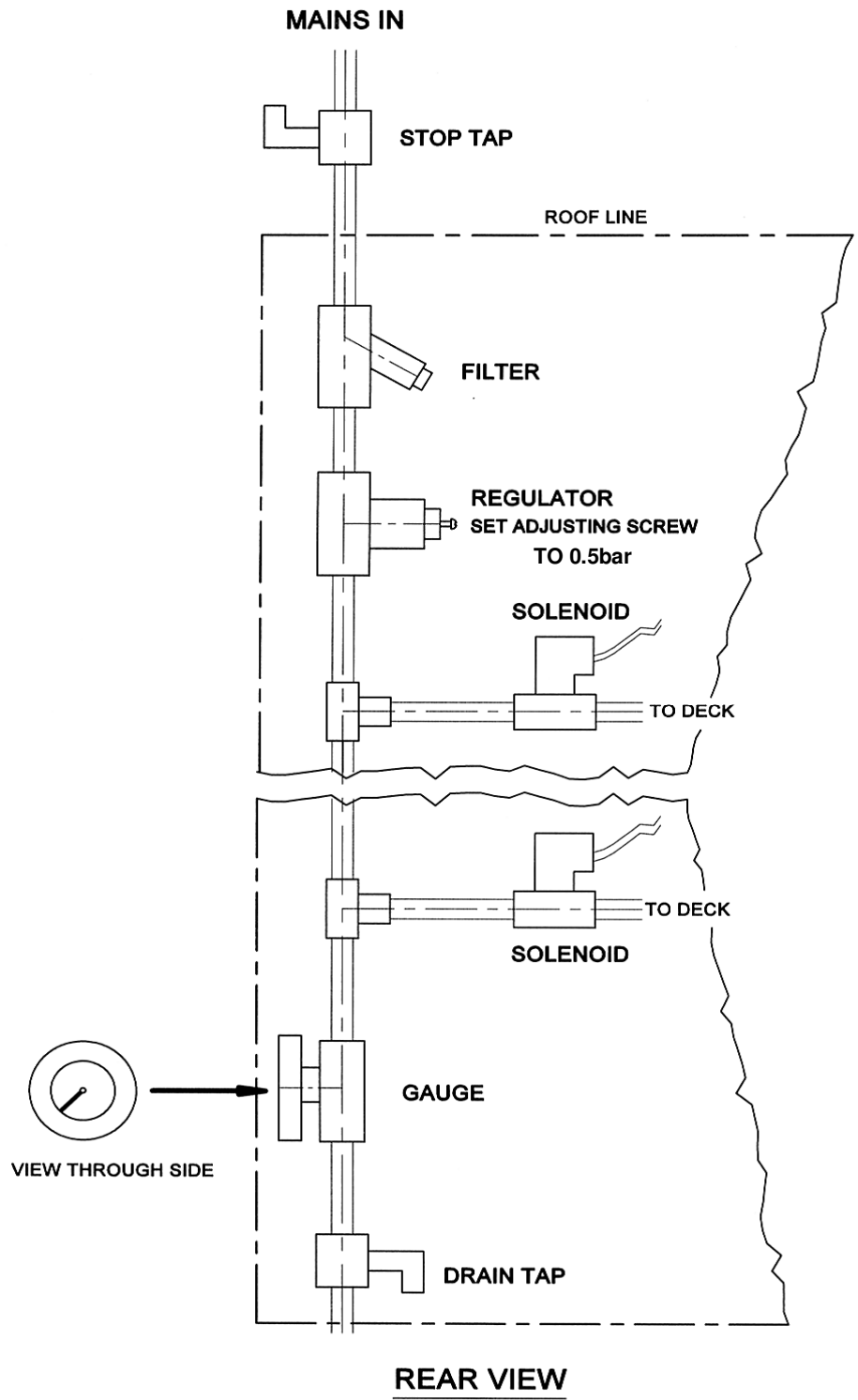
**It is imperative that the water delivery to the deck oven is checked.  
NOTE. DYNAMIC PRESSURE, NOT STATIC, IS BEING MEASURED.**

(SEE DRAWING ON NEXT PAGE)

1. Flush out the main feed pipe to be used until water runs clear and free from debris.
2. Connect main feed to oven.
3. Place a container under the test valve.
4. Slowly open drain valve and set the regulator to 0.5bar using the screw underneath.
5. When the pressure has stabilised shut the test valve.

REPEAT 3, 4 AND 5 AT THE END OF INSTALLATION.

# REAR WATER CONNECTIONS USED FOR SET UP



# INITIAL START UP

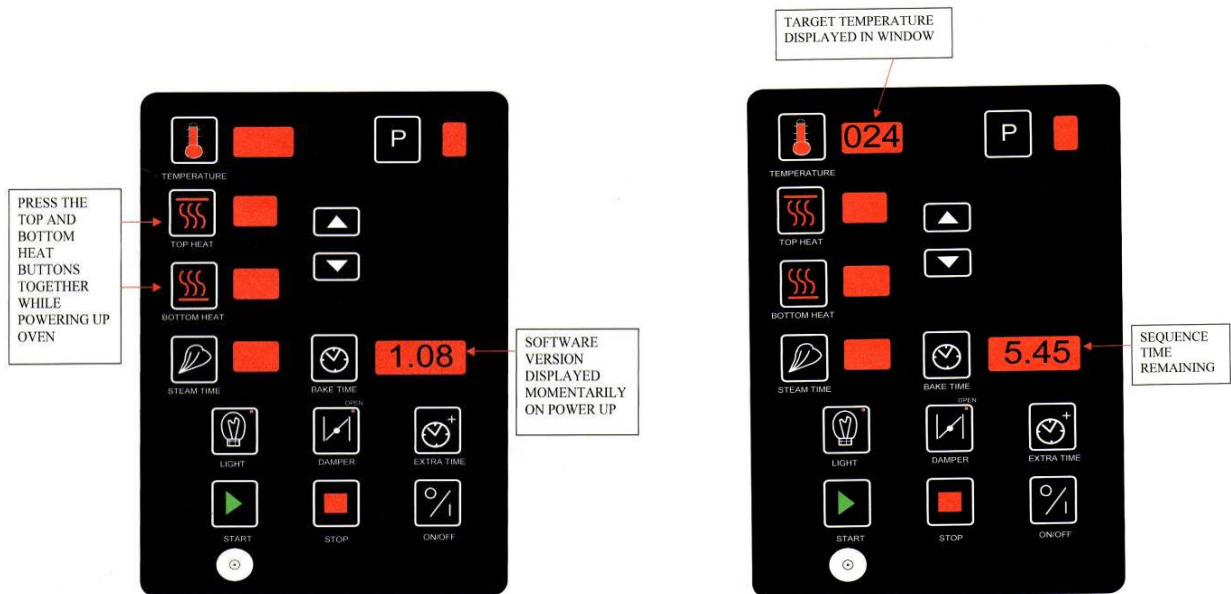
**THIS PROCEDURE MUST BE ADHERED TO FOR THE OVEN WARRANTY TO BE VALID.**

In order for the oven to give good reliable service the deck tiles must be initially brought up to temperature as stated below. After this running in period the oven can be used as required.

## Tile seasoning sequence

1. To initialise the sequence press the top and bottom heat buttons together, keep depressed while powering oven on. After the controller beeps and the software version is displayed release the buttons.
2. The controller now displays the target temperature in the bake temperature window and the seasoning routine time remaining is shown in the bake time window.
3. The target temperature display will increase in pre set increments over a 5 hours 45 minute period and the countdown timer will show time remaining.
4. At the end of the sequence the controller switches into standby mode and the oven can then be used normally.
5. During this process the damper will open on the hour and remain open for 30 minutes to vent the moisture from the oven chamber.

**Note** – to stop the tile seasoning sequence switch the oven off at the main electrical supply Isolator then switch back on, controller reverts to standby.



## 6.0 ISOLATION

---

- A wall isolator rated for the specific model of oven installed must be available in order to completely isolate the oven.

**To stop the oven in an emergency Switch off at the main isolator**

## 7.0 CLEANING

---

### DAILY CLEANING INSTRUCTIONS

**ISOLATE OVEN FROM MAINS SUPPLY BEFORE CLEANING.**

- Sweep any debris out of oven after it has been allowed to cool.  
Use a vacuum cleaner with metal attachments (able to take heat) if available.
- Brush down and wipe oven front, back and sides with a damp cloth.
- Spot clean with a damp cloth, which has been soaked in a solution of mild detergent, and hot water, paying particular attention to ensure excess water is not applied around the area of the electrical panels.

**NOTE: ENSURE WATER DOES NOT ENTER CONTROL PANEL MOUNTING OR ROOF MOUNTED FAN.**

### WEEKLY CLEANING INSTRUCTIONS

**ISOLATE OVEN FROM MAINS SUPPLY BEFORE CLEANING.**

- Complete daily cleaning as above.
- Scrub oven wheels with a mild detergent and hot water using nylon cleaning brush (excess water will rust metal).
- Ensure the oven roof area is clear of debris and dust build up.

## 8.0 OPERATING CONDITIONS ---

- It is recommended that a space of at least 2 metres be left in front of the oven for ease of operation and safety.
- Bakery utensils must not be used to operate the control panel buttons.

## 9.0 PRINCIPLE OF OPERATION ---

**NOTE:** REFER TO YOUR OWN COMPANY'S RECIPE MANUAL FOR OVEN TEMPERATURE SETTINGS.

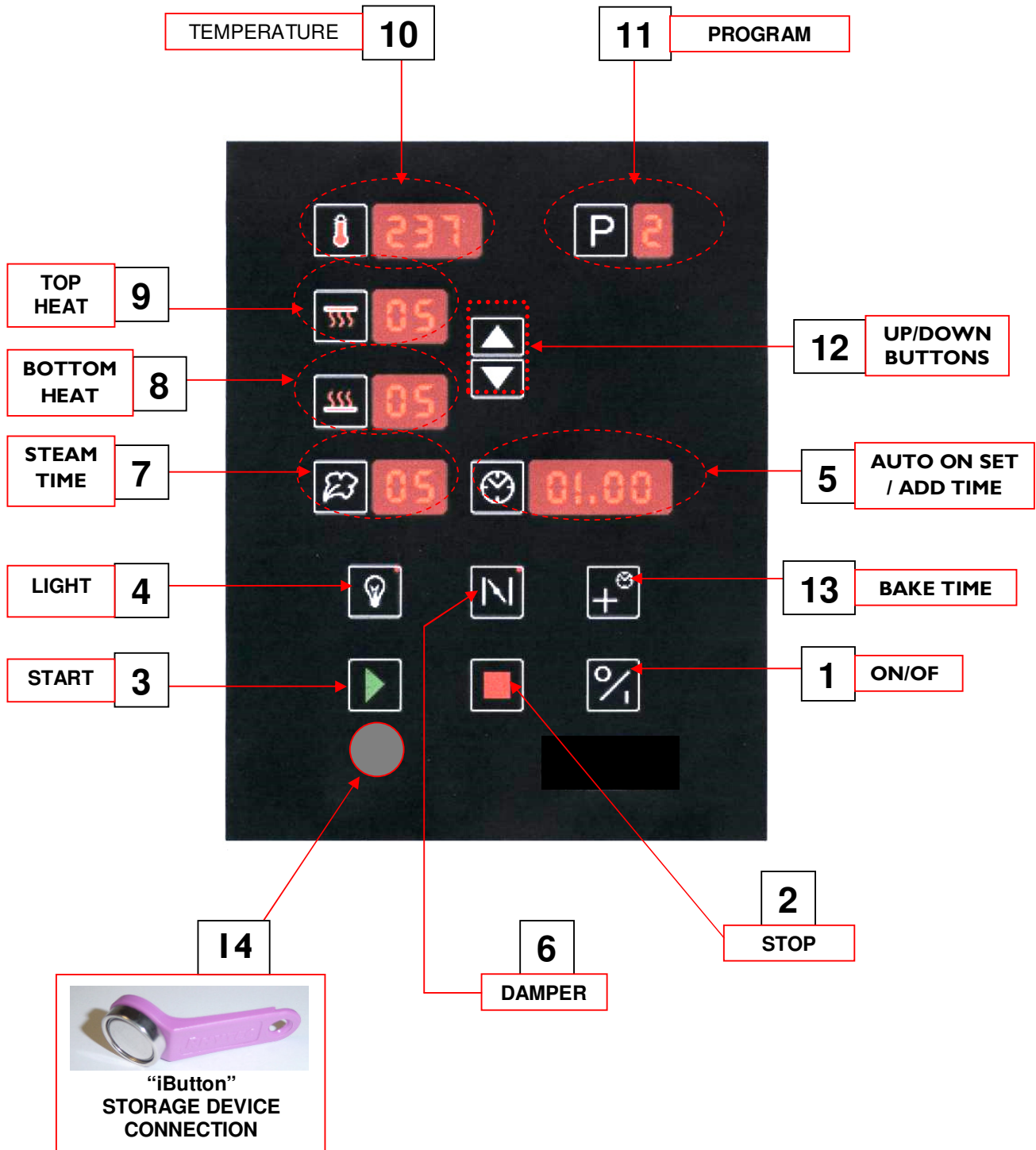
Products are baked in an insulated heated chamber. The temperature is regulated by a thermocouple having an LED read-out on the front control panel. Baking heat is radiant with top and bottom heat being adjusted by means of separate controls. This enables heat to be "balanced" according to product requirement.

STEAM is provided from an integral boiler, and is introduced into the chamber on demand. This is automatically controlled by the programmed parameters. **Once steamed the oven will not steam until the steam unit has recovered heat, typically 3-10 minutes depending on the program selected.**

All ovens are fitted with a steam damper that evacuates steam humidity into a vent at the rear of the oven.

# 10.0 OPERATING INSTRUCTIONS

## CLASSIC DECK OVEN CONTROLLER



1. **ON/OFF**  
Turns controller on from standby mode.  
*Also used to exit setup mode.*
2. **STOP**  
*Stops bake cycle.*  
*Also used to go to function setup menu on power up (with button 3)*
3. **START**  
*Starts bake cycle.*  
*Also used to go to setup menu on power up (with button 2)*  
*Also silences "2 minutes from end of bake" alarm when sounding.*
4. **LIGHT**  
**Interior light on/off.**  
*Red light shows when light is on.*  
*Press to turn on and press again to turn off.*
5. **BAKE TIME/ADD TIME**  
*Used to access set bake time and current time and day setup.*  
*Also used to jump to day/hours/minutes when setting time and setting auto on time.*

### **IF 7 DAY TIMER ENABLED**

*During bake cycle, Used to add extra bake time (1 minute each press).  
At end of bake, press for two minutes and then once for each extra  
minute required.*

6. **DAMPER**  
*Press to open damper. Press again to close damper.*  
*(only works during bake).*  
*Closes when "stop" pressed at end of bake and while steaming.*  
*Red light shows when in open position.*
7. **STEAM TIME**  
*Press to access steam time and pre-steam mode.*  
**If pre-steam function is enabled.**  
*Press once (reds dots appear). Use up/down keys (12) to change to required  
setting. P0 = no pre-steam, P1 = 1 second, P2 = 2 seconds.*  
*Press again to set steam time using up/down keys (12).*  
*Press button again to save or wait 10 seconds to auto-save.*  
**If pre-steam function is not enabled.**  
*Press to set steam time using up/down keys (12).*  
*Press button again to save or wait 10 seconds to auto-save.*
8. **BOTTOM HEAT**  
*Press to set the bottom heat cycle percentage. Use up/down keys (12) to  
adjust the value.*  
*Press button again to save or wait 10 seconds to auto-save.*
9. **TOP HEAT**  
*Press to set the top heat cycle percentage. Use up/down keys (12) to adjust  
the value.*  
*Press button again to save or wait 10 seconds to auto-save.*

10. **TEMPERATURE**

*Press to set the bake temperature required. Use up/down keys (12) to adjust the value.*

*Press button again to save or wait 10 seconds to auto-save.*

11. **PROGRAM**

*Use up/down keys (12) to go to required program.*

*Press “p” for 5 seconds and all displays will flash.(A beep confirms settings are now saved)*

12. **UP/DOWN BUTTONS**

*Used to adjust values when required.*

13. **AUTO ON SET / ADD TIME**

**IF 7 DAY TIMER ENABLED**

*Used to access auto switch on times.*

**IF 7 DAY TIMER DISABLED**

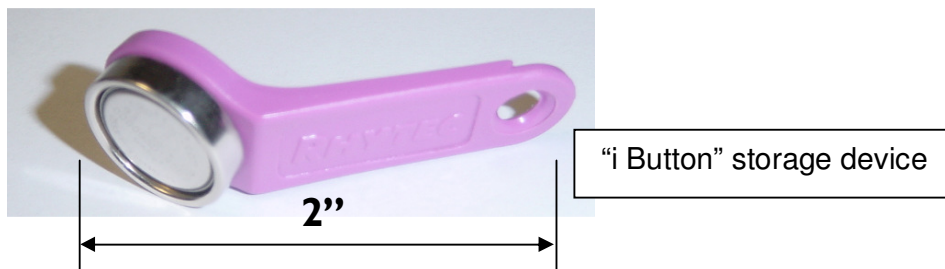
*During bake cycle, Used to add extra bake time (1 minute each press).*

*At end of bake, press for two minutes and then once for each extra minute required.*

14. **“i BUTTON” CONNECTION**

Used with special “iButton” storage device to change firmware of control board.

(SEE NEXT PAGE FOR DETAILS)



**NOTE**

**Whenever power is connected to the board, 8 minutes**

**must elapse before the oven will steam.**

*This allows the bottom elements to heat enough for steaming.*

This will always happen if the power is disconnected and connected again, even if the oven is hot.



## **FIRMWARE UPDATE USING IBUTTON**

Place unit into standby state so that the clock is displayed.

Place iButton onto probe.

Controller will upload data from iButton.

**The bake temperature window will display a countdown** (from 128 down to 0) as data is uploaded.

**The top heat window displays the number of failed reads** from the iButton. If this count reaches 08 then the upload will terminate (see Error conditions below).

Once the data has been uploaded and checked, the unit will enter a programming state.

**The bake temperature window will display 'Prg'**. This process should take around 8 seconds to complete.

***Note: during this programming phase, power must not be removed from the unit, or the ibutton removed from the reader probe***

*If the power is interrupted, the re-programming of the Flash memory will be incomplete and the unit will cease to function. The only way to recover from this is to re-program the unit via a pc with a programming cable.*

When the programming has completed, the unit will reset and **display the new firmware version in the time window**. This will be continuously displayed until the iButton is removed from the probe. The unit will then display the clock and continue to function as normal.

### Error conditions

Error codes will be displayed in the bake temperature window if an upload fails.

In all the following situations, no changes will be made to the unit. Firmware is only updated if the upload from the iButton has been successful.

If an error is displayed and the iButton is still connected, the unit will wait for disconnection before resetting and functioning as normal. Another upload attempt may be made.

If the iButton is removed from the probe whilst uploading is in progress, the upload will terminate and the unit will reset.

#### **E01:**

If the unit fails to successfully read the iButton eight times in succession, then an E01 fault will be displayed in the bake temperature window. This might be caused by poor contact between the probe and the iButton, or bad data on the iButton.

Try cleaning the surface of the probe – any small amount of dirt can affect the connection.

#### **E02:**

This error will be displayed if the file information on the iButton is incorrect or the iButton is blank (unprogrammed).

#### **E03:**

This error will be displayed if the iButton file CRC (cyclical redundancy check) does not match that calculated by the unit following a download i.e. bad iButton file.

# OPERATION

1. With oven in standby mode (power on) press “on” button (1).
2. Press program button (11)  
Using up/down keys (12) choose the set program required.

*Oven will heat to the temperature required. Oven is ready for use when the display shows the temperature of the program chosen and if steam is required the display stops flashing.*

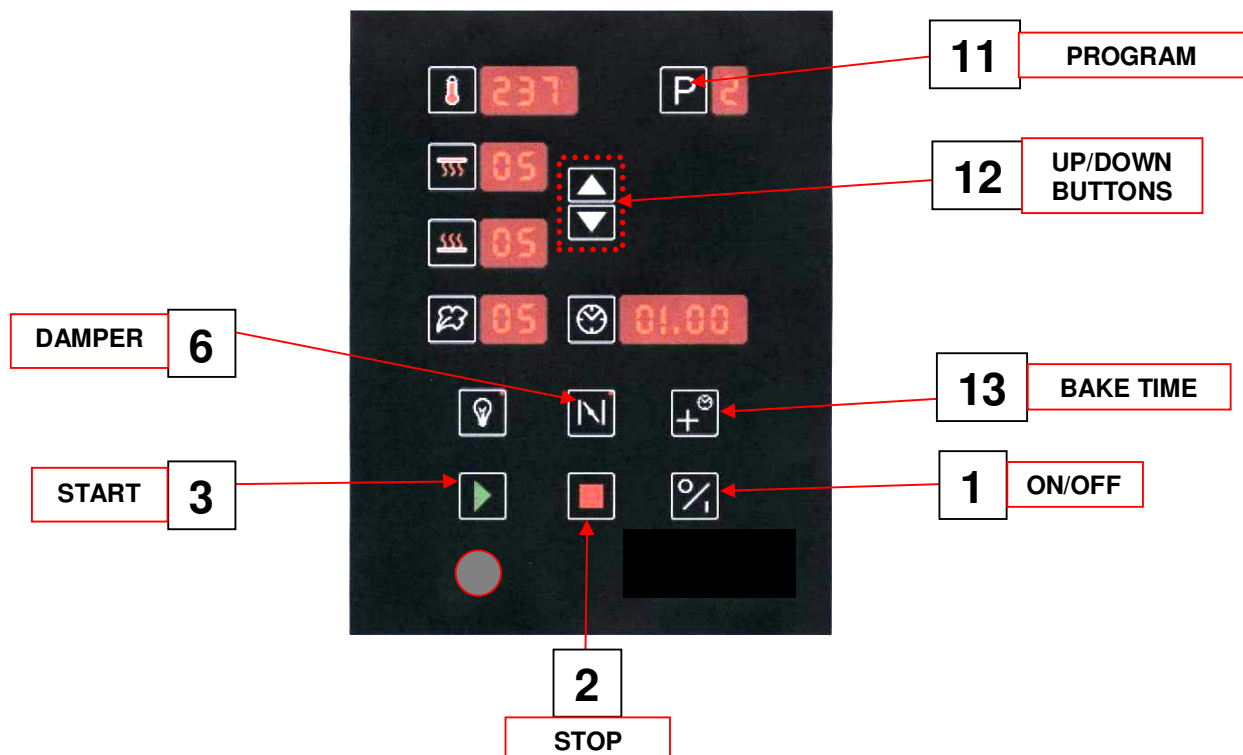
**Note:**

*If the oven is already hot and the set temperature is lower than the current temperature of the oven, the door should be opened to allow the temperature to drop.*

3. Load oven as required.  
*To preserve heat, do not leave doors open more than needed to load oven.*
4. Press start (3)  
*Press (13) at anytime during the bake to add 1 minute to the bake time.*

**DAMPER (6)** Press to open damper. Press again to close damper.  
Red light shows when in open position.  
(Closes if left open for 90 minutes)

5. IF ENABLED IN SETUP. 2 minutes from the end of the bake the buzzer will sound for 10 seconds. *Press start (3) to silence if required.*
6. At the end of the bake the buzzer will sound again. Press stop (2).



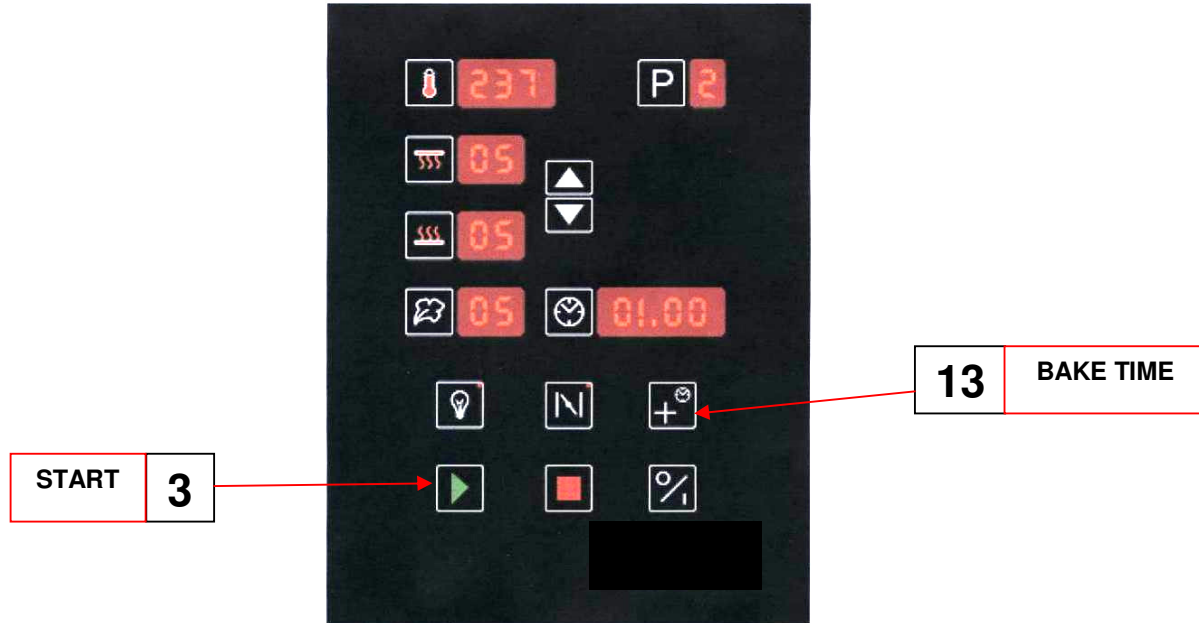
## IF EXTRA TIME IS REQUIRED AT THE END OF THE BAKE (AFTER PRESSING STOP).

Press bake time (**13**) to set 2 minutes and 1 minute for each additional press.

After required time has been set, either press start (**3**) or wait 5 seconds and the bake countdown will start automatically.

### NOTE

Steam is not available when using this extra time baking.



## DAY AND TIME SET UP

Turn the power supply on.

*This will put the oven in “standby mode” with only the clock showing.*

Press clock button (5) and dots will flash under the hours in the time window.

Change value using up/down keys (12).

Press clock button (5) again and dots will flash under the minutes in the time window.

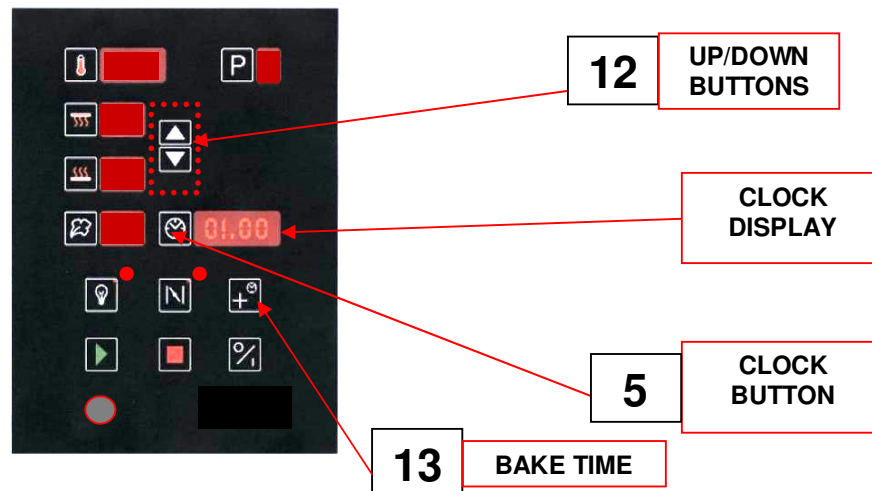
Change value using up/down keys (12).

Press clock button (5) again and day number will show.

Change value using up/down keys (12).

(Usually day 1 is used as Monday)

To save the settings press clock button (5) within 5 seconds.



## SETTING 7 DAY TIMER (if F15 enabled in parameters)

To set a timer event -

1. Switch the controller into standby( press the I/O button), I.e. only the current time displayed in the bake time window.

2. Press the bake time button (13) - timer day of week is displayed in temp window (dots appear next to day) to alter set day use the up/down arrow buttons (12)

3. Press the clock button (5), dots appear next to the hour display - to alter set hours use the up/down arrow button.

4. Press the clock button (5), dots appear next to the minute display - to alter set minutes use the up/down arrow buttons (12).

**note - if you do not alter the hours/minutes within 6 seconds of selecting, the timer setup will default back to day setting**

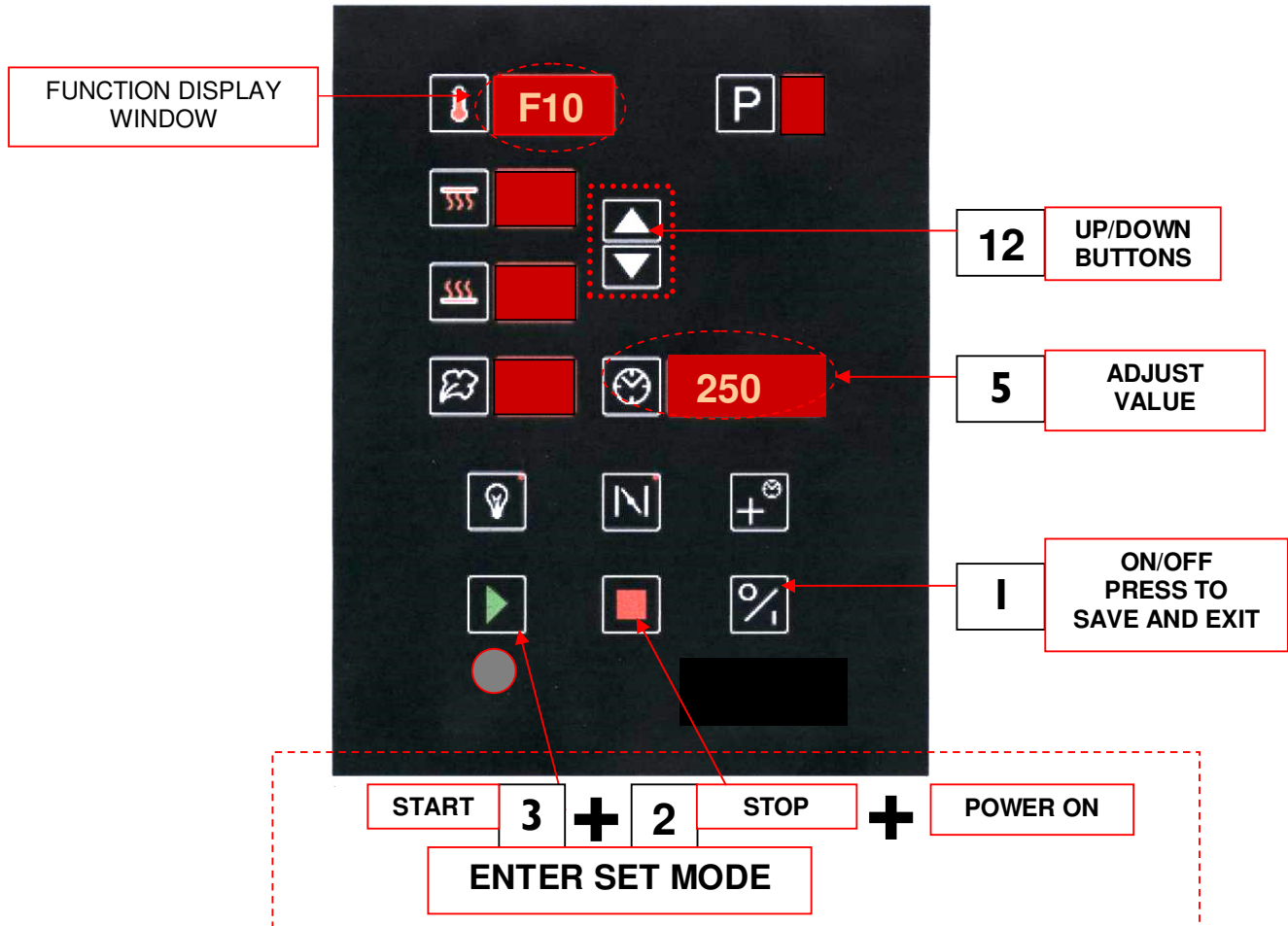
**i.e. dots appear next to the P - in the temp window, just press the bake time button to get back to the time setup again.**

**Setting a time of 00.00 in the timer setup is a non-event so will not switch on the controller.**

5. Press the bake time button (13) to save and exit the timer setup .

# SET UP MODE

To enter set up mode press both **start (3)** and **stop (2)** buttons and then **turn the power supply on at the same time.**



Change to the function required using up/down keys (12).  
(see next page for function list)

Press clock button (5). (Dots appear on display)

Change value using up/down keys (12).

Press clock button (5) to save setting.

To exit set up mode and save changes press **on/off (1)**.

## NOTE

**Any changes to the functions are only saved when exiting using on/off (1)**

## **SET UP PARAMETER FUNCTION LIST (“F” SETTINGS)**

- F1 - MONO CONSTANT (FACTORY SET AT 210)**
- F2 - TOP HEAT GAIN (FACTORY SET AT 50)**
- F3 - BOTTOM HEAT GAIN (FACTORY SET AT 50)**
- F4 - FRONT TOP ELEMENT OFFSET VALUE (0-50) (FACTORY SET AT 25)**
- F5 - DEG “C”, DEG”F”**
- F6 - “2 MINUTE FROM END OF BAKE ALARM (ENABLE=1,DISABLE=0)**
- F7 - PRE-STEAM - (ENABLE=1, DISABLE=0)**
- F8 - STEAM - (ENABLE=1, DISABLE=0)**
- F9 - BAKE TEMPERATURE OFF-SET (+ - 25 DEG C)(set to -10)**
- F10 - MAXIMUM SET TEMPERATURE LIMIT (250 DEG “C” DEFAULT)  
MAXIMUM TEMPERATURE 290 DEG “C”**
- F11 - BAKE CONTROLS LOCKOUT – (ENABLE=1, DISABLE=0)  
(TO PREVENT OPERATOR CHANGING SET BAKE PARAMETERS)**
- F12 SLEEP MODE DELAY TIME - 60 MINUTES MAX. 0 = DISABLED**

After switching on the controller, *before the sleep delay time is initiated (if enabled in F12)*, the set bake temperature must be reached, steam recovery time elapsed and a bake cycle started and stopped.

Once the stop bake button (2) has been pressed at the end of a bake, the sleep delay timer counts down until it has timed out. At this point the controller switches into sleep mode (*SLP displayed in temperature window*) and the oven will drop to a pre-set fall back temperature of 170 deg c, *which it will maintain*.

**Note** – *dampers closes when oven goes into sleep mode.*

**Pressing any button during the sleep mode delay time** will not affect the countdown, *apart from the O/I button which switches the controller off*. Pressing the start/stop bake buttons will reset the countdown timer.

**Pressing any button while in sleep mode** (*apart from lights on/off(4) – which operates as normal and the panel O/I on/off(1), which will turn the controller off*) will bring it out of sleep mode, at which point the oven will heat up to its previous set bake temperature (typical recovery time from 170 deg c to 230 deg c is 15 minutes approx)

**Note** – *if no buttons on the controller are pressed after exiting sleep mode, the controller will switch back into sleep mode, after the sleep delay time has expired.*

- F13 - INTERIOR LIGHT AUTO-TIMEOUT - ON/OFF.  
BETWEEN 1 AND 20 MINUTES (0 = disabled)**
- F14 - 0-9 PROGRAMS  
Sets the number of programs available to the operator**
- F15 - 7 DAY TIMER - (ENABLE=1, DISABLE=0)  
IF ENABLED, “SET BAKE” TIME ACTS AS EXTRA TIME BUTTON.  
IF DISABLED, “AUTO ON SET” ACTS AS EXTRA TIME BUTTON.**
- F16 - 8 HOUR COUNT DOWN TIMER - (ENABLE=1, DISABLE=0)  
AFTER 8 HOURS THE OVEN WILL TURN OFF (NOT DURING A BAKE CYCLE).  
BEFORE SWITCH OFF, DISPLAYS WILL FLASH AND ALARM WILL SOUND. IF ANY BUTTON IS PRESSED AT THIS TIME, AN HOUR WILL BE ADDED TO THE TIMER.**
- F17 - LAMP OUTPUT SOFT START - (ENABLE/DISABLE)**
- F18 - STEAM TYPE - (PLATE = 0, TROUGH = 1)**
- F19 - STEAM TARGET TEMPERATURE - (50 – 250 DEG C)**

**ANY CHANGES MADE WILL ONLY BE SAVED BY PRESSING THE  
ON/OFF BUTTON (1) WHEN EXITING**

# 11.0 TROUBLESHOOTING

---

## 11.1 NONE OF THE DECKS SWITCHED ON.

- Is oven isolator on?
- Check if bakery main power supply time clock is working (if fitted).
- Is clock set correctly to bring oven on at required time?

## 11.2 ONE DECK HAS NOT SWITCHED ON.

- Check if individual deck timer is set to bring on at required time.

## 11.3 UNEVEN OR PATCHY BAKE

- Door being opened too often or too long whilst loading (front pale, back burnt).
- Faulty element.
- Top or bottom deck elements not functioning.
- Uneven loading.

## 11.4 TEMPERATURE GOING WELL OVER SET TEMPERATURE

When empty the temperature of a deck oven can exceed the set baking temperature. This overheat is marginal when the deck is full of product. If the elements are continuing to work after the set temperature has been reached call MONO service.

(please allow up to 7deg. C difference before diagnosing a fault condition),

## 11.5 POOR RECOVERY OF SET TEMPERATURE WHEN LOADED

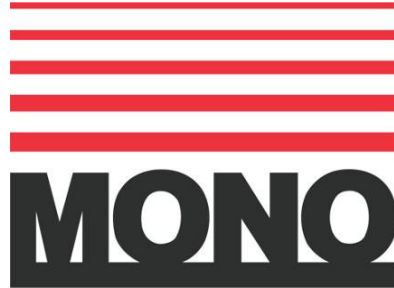
- The doors may be being left open too long during loading, allowing heat to escape.
- The damper may be left open during loading or baking allowing heat to escape.
- Top and/or bottom heat may not be working.

## 11.6 STEAM SYSTEM NOT OPERATING CORRECTLY

Check water supply is turned on. If ok, contact Mono Equipment.

## 12.0 SERVICE AND SPARES

---



**MONO**  
Queensway  
Swansea West Industrial Estate  
Swansea. SA5 4EB UK

**email: [spares@monoequip.com](mailto:spares@monoequip.com)**  
**Web site: [www.monoequip.com](http://www.monoequip.com)**

**Tel. 01792 561234**  
**Spares +044(0)1792 564039**  
**Fax. 01792 561016**

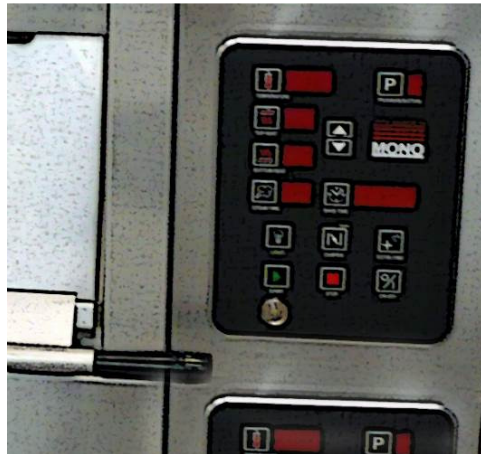




## 13.0 SPARES INFORMATION

## Spares List MONO DX2 LED Deck Oven

Heater MCB	B872-22-008
Control Power Supply MCB	B872-22-063
Overheat Thermostat	B888-30-014
Cooling fan MCB	B872-22-061
Control circuit power supply	B801-93-004
Top heat contactor	B801-08-021
Bottom heat contactor	B801-08-021
Water solenoid	B867-83-007
Damper solenoid	B749-83-004
Mains isolator	B851-07-002
Top element 0.6Kw	B854-04-004(B854-04-013 220v)
Top element 0.44Kw	B854-04-036(B854-04-045 220v)
Top element 1.0Kw	B854-04-003(B854-04-012 220v)
Bottom element 0.6Kw	B854-04-004(B854-04-013 220v)
Bottom element 1.0Kw	B854-04-003(B854-04-012 220v)



## 15.0 ELECTRICS

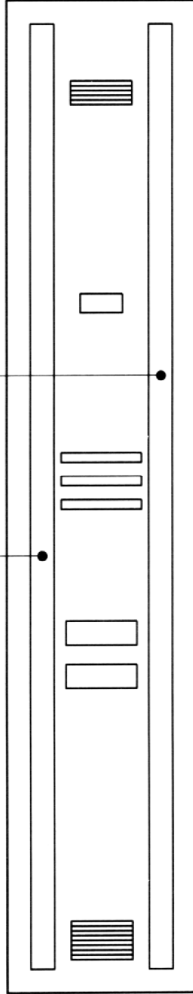
## **Parts List : MONO DX2 LED Deck Oven**

**(for use with following drawings)**

<b>F1</b>	Heater <b>MCB</b>	B872-22-008
<b>F2</b>	Heater <b>MCB</b>	B872-22-008
<b>F3</b>	Heater <b>MCB</b>	B872-22-008
<b>F4</b>	Control Power supply <b>MCB</b>	B872-22-063
<b>F5</b>	Overheat Thermostat	B888-30-014
<b>F6</b>	Cooling fan <b>MCB</b>	B872-22-061
<b>T1</b>	Control circuit Power supply	B801-93-004
<b>K1</b>	Top heat contactor	B801-08-021
<b>K2</b>	Bottom heat contactor	B801-08-021
<b>Y1</b>	Water solenoid	B867-83-007
<b>Y2</b>	Damper solenoid	B749-83-004
<b>Q1</b>	Mains isolator	B851-07-002
<b>R1</b>	Top element 1.0Kw	B854-04-003(B854-04-012 220v)
<b>R2</b>	Top element 0.6Kw	B854-04-004(B854-04-013 220v)
<b>R3</b>	Top element 0.6Kw	B854-04-004
<b>R4</b>	Top element 0.6Kw	B854-04-004
<b>R5</b>	Top element 0.6Kw	B854-04-004
<b>R6</b>	Top element 0.6Kw	B854-04-004
<b>R7</b>	Top element 0.44Kw	B854-04-036(B854-04-045 220v)
<b>R8</b>	Bottom element 1.0Kw	B854-04-003(B854-04-012 220v)
<b>R9</b>	Bottom element 0.6Kw	B854-04-004(B854-04-013 220v)
<b>R10</b>	Bottom element 0.6Kw	B854-04-004
<b>R11</b>	Bottom element 0.6Kw	B854-04-004
<b>R12</b>	Bottom element 0.6Kw	B854-04-004
<b>R13</b>	Bottom element 0.6Kw	B854-04-004
<b>R14</b>	Bottom element 0.6Kw	B854-04-004

IF IN ANY DOUBT - ASK

25 X 40 TRUNKING




TB1

F5

F1 F3  
F2

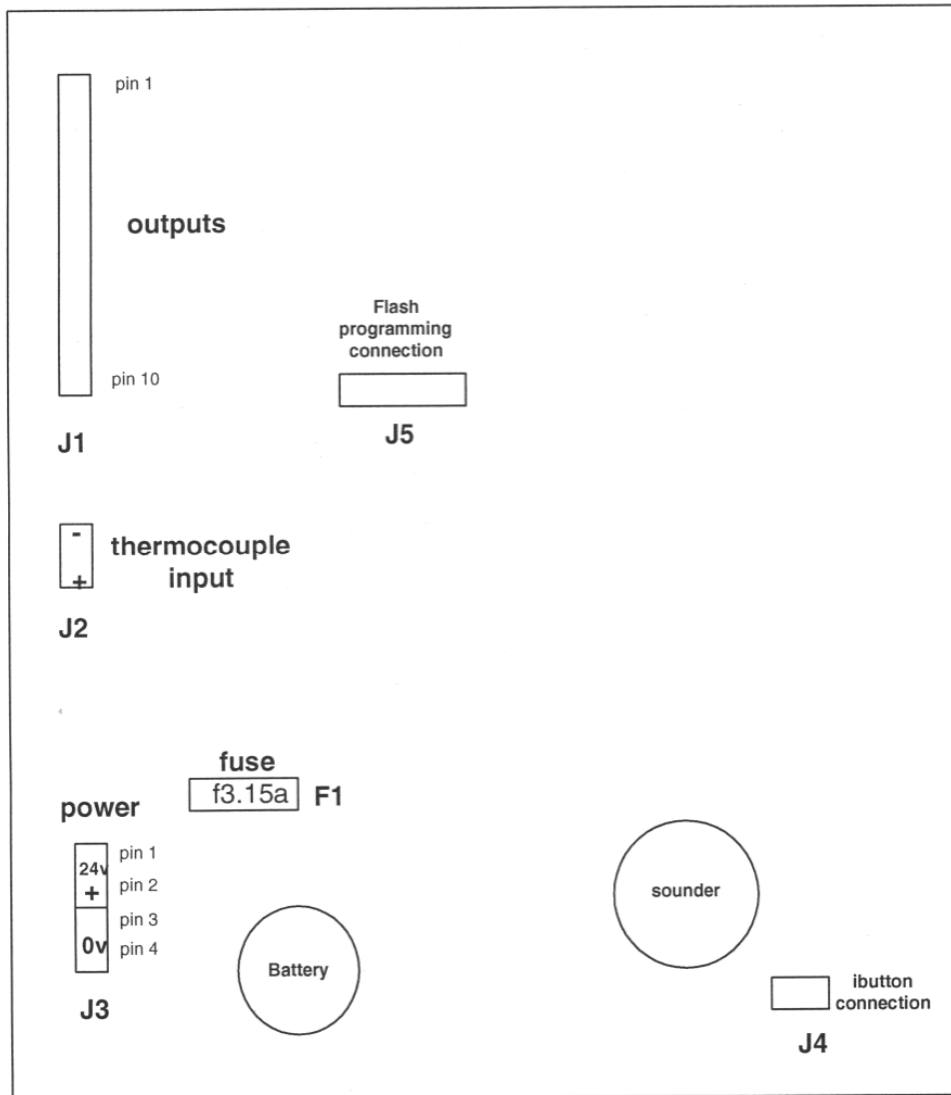
K1 K2

TB2

REV	SIG	DATE	REVISION	ECN NO.
			RIGID DX OVEN CONTROL PANEL LAYOUT	
 <b>MOND EQUIPMENT</b> QUEENSWAY 100 WEST IND PARK SWANSEA SA5 4EB. TEL: (01792) 561234 FAX: (01792) 561016			TITLE:	
ELECTRICAL SPECIFICATIONS:-			DRAWN: RAC	
415V 3 PHASE + N			ELECTRICALLY APPROVED BY: AT	
			DATE: 30/11/05	REV: --
			DRAWING NO. M245E25-50314	

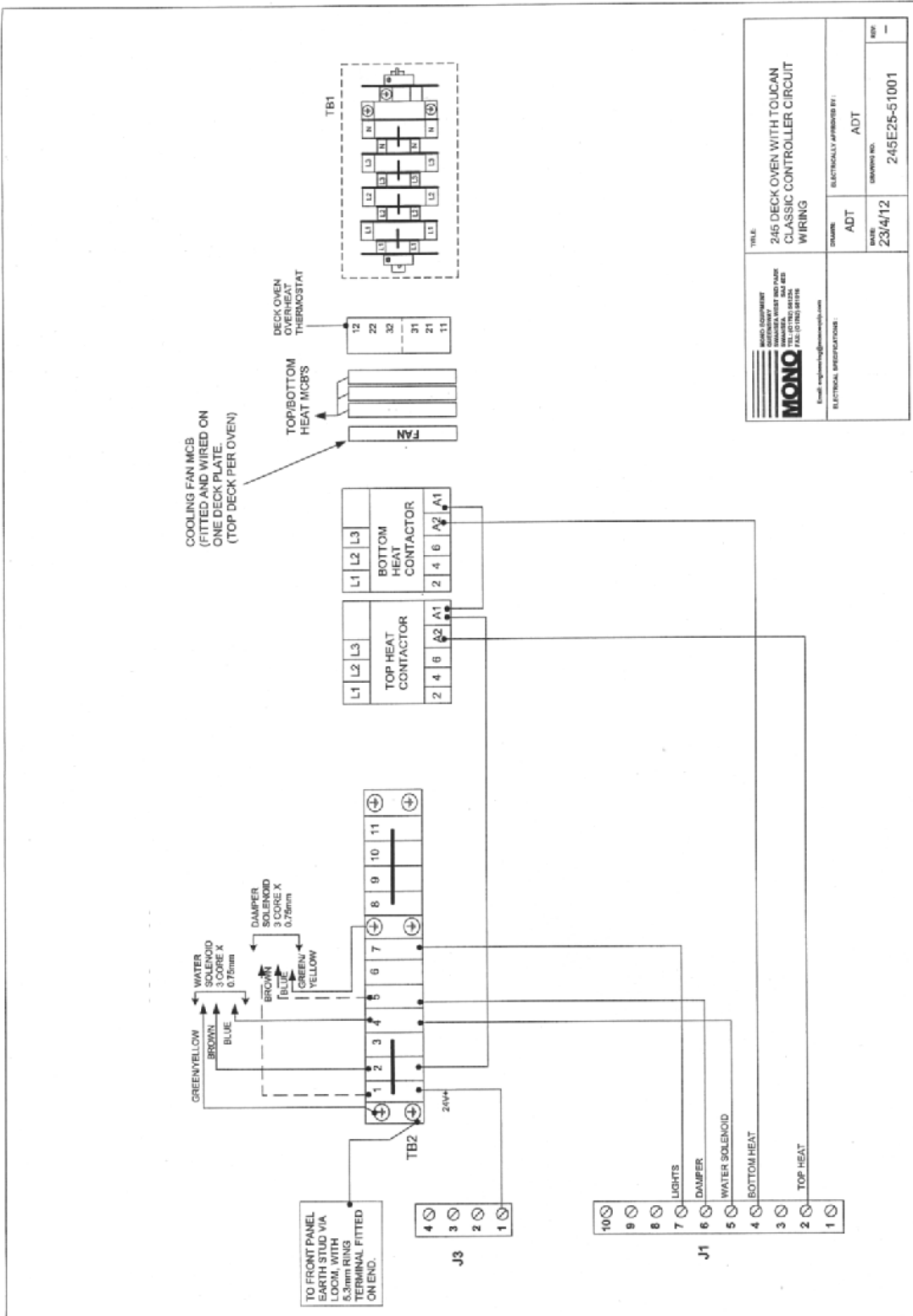
COPYRIGHT © 1998 - THIS DESIGN/DRAWING IS THE PROPERTY OF MOND EQUIPMENT LTD. AND MUST NOT BE REPRODUCED, COPIED, NOR ITS CONTENTS DIVULGED WITHOUT PRIOR WRITTEN PERMISSION.

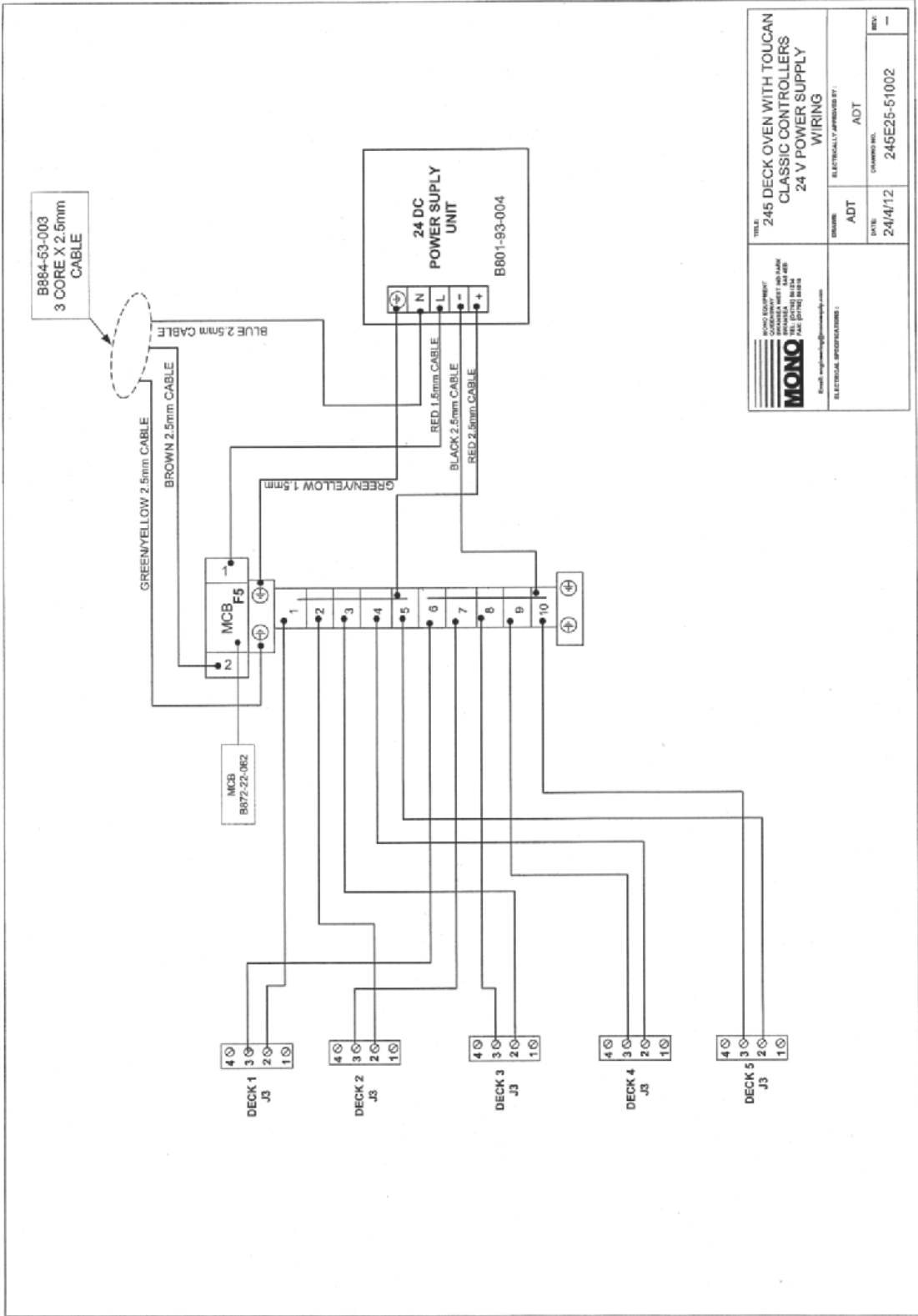
# CONTROLLER LAYOUT



## **OUTPUTS**

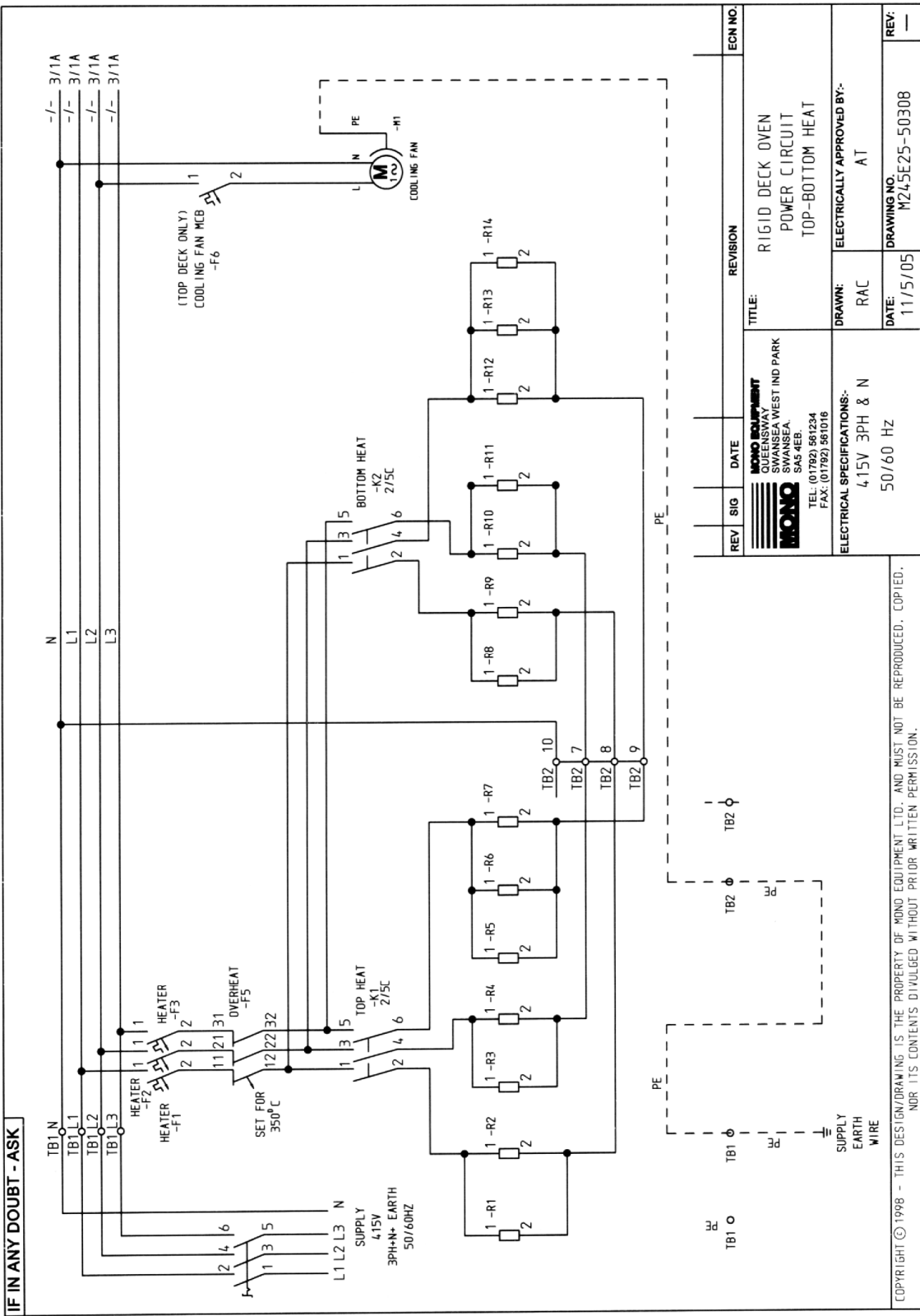
PIN 1 – 24v  
 PIN 2 – TOP HEAT OUTPUT  
 PIN 3 -- TOP FRONT HEAT OUTPUT  
 PIN 4 – BOTTOM HEAT OUTPUT  
 PIN 5 – STEAM OUTPUT  
 PIN 6 – DAMPER OUTPUT  
 PIN 7 – LIGHT OUTPUT  
 PIN 8 – CANOPY FAN RELAY OUTPUT  
 PIN 9 – 24v  
 PIN 10 – 24v





 <small>MONO EQUIPMENT          1000 EAST AVENUE          SUITE 100          DENVER, CO 80202          TEL: (303) 751-1111          FAX: (303) 751-1112          Email: info@mono.com</small>	TITLE: 245 DECK OVEN WITH TOUCAN CLASSIC CONTROLLERS 24 V POWER SUPPLY WIRING		
	DRAWN: ADT	ELECTRICAL APPROVED BY: ADT	DATE: 24/4/12
	ORDER NO.: 245E25-51002	REV: -	





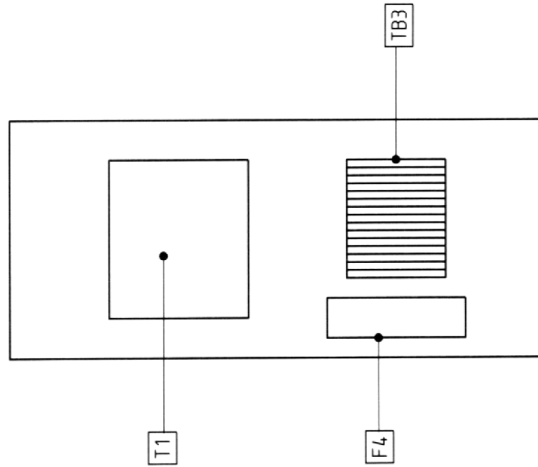
REV	SIG	DATE	REVISION	ECN NO.

<b>MONO EQUIPMENT</b> QUEENSWAY SWANSEA SA5 4EB TEL: (01792) 561234 FAX: (01792) 561016	<b>TITLE:</b> RIGID DECK OVEN POWER CIRCUIT TOP-BOTTOM HEAT
<b>ELECTRICAL SPECIFICATIONS:-</b> 415V 3PH & N 50/60 HZ	<b>DRAWN:</b> RAC
<b>DATE:</b> 11/5/05	<b>ELECTRICALLY APPROVED BY:-</b> AT
<b>DRAWING NO.</b> M245E25-50308	<b>REV:</b> —

COPYRIGHT © 1998 - THIS DESIGN/DRAWING IS THE PROPERTY OF MONO EQUIPMENT LTD. AND MUST NOT BE REPRODUCED, COPIED, NOR ITS CONTENTS DIVULGED WITHOUT PRIOR WRITTEN PERMISSION.

IF IN ANY DOUBT - ASK

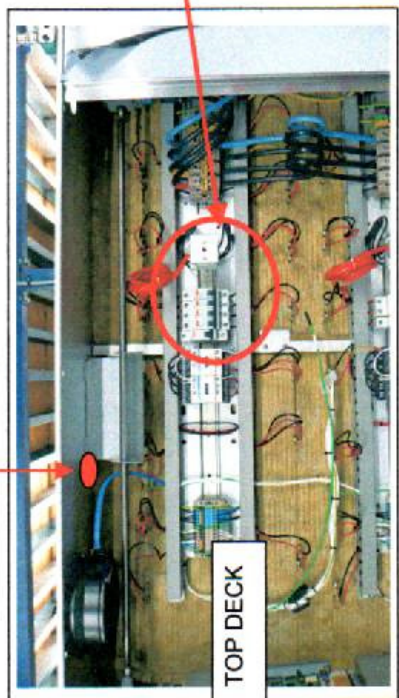


REV	SIG	DATE	REVISION	ECN NO.
 <b>MONO EQUIPMENT</b> QUEENSWAY SWANSEA WEST IND PARK SWANSEA SA5 4EB TEL: (01792) 561234 FAX: (01792) 561016		TITLE: RIGID DECK OVEN POWER SUPPLY UNIT LAYOUT		
ELECTRICAL SPECIFICATIONS:-		DRAWN: RAC		
4.15v 3 PHASE + N		DATE: 6/12/05		
		ELECTRICALLY APPROVED BY:- AT		
		DRAWING NO. MZ45E25-50313		
		REV: --		

COPYRIGHT © 1998 - THIS DESIGN/DRAWING IS THE PROPERTY OF MONO EQUIPMENT LTD. AND MUST NOT BE REPRODUCED, COPIED, NOR ITS CONTENTS DIVULGED WITHOUT PRIOR WRITTEN PERMISSION.

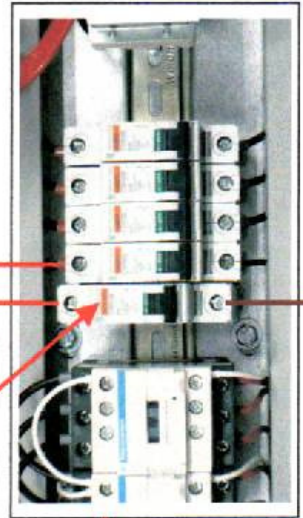
**ELECTRICAL CONNECTIONS FOR ADDING CANOPY TO FG245 DECK OVEN**

DRILL 16mm DIAMETER HOLE IN TOP SHEET AND FIT CABLE GLAND

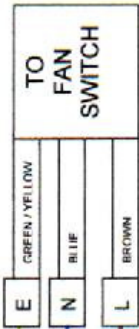


TOP DECK

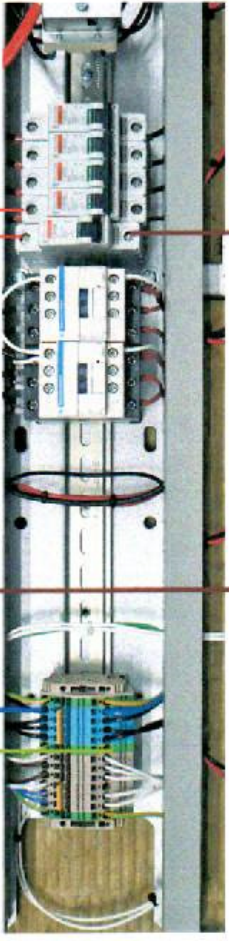
FIT 1amp TYPE "D" CIRCUIT BREAKER



FIT LINK (4mm²)



3 CORE 1.5mm<sup>2</sup>



CANOPY IF FITTED

**WARNING** ISOLATE OVEN FROM POWER SUPPLY BEFORE REMOVING SIDE PANEL AND WORKING ON ELECTRICS

If a fault arises, please do not hesitate to contact the  
Customer Service Department, quoting the **machine serial number**  
on the silver information plate of the machine and on the front cover of this manual

**MONO**

Queensway

Swansea West Industrial Estate

Swansea. SA5 4EB UK

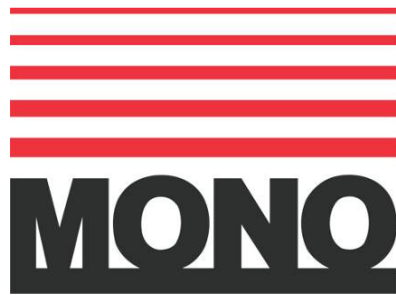
**email:spares@monoequip.com**

**Spares +44(0)1792 56039**

**Web site:www.monoequip.com**

**Tel. 01792 561234**

**Fax. 01792 561016**



**MONO Equipment**

Queensway, Swansea West Industrial Park, Swansea, SA5 4EB UK

Tel. 01792 561234 Fax. 01792 561016

Email:mono@monoequip.com

**[www.monoequip.com](http://www.monoequip.com)**

As it is our policy to improve our machines continuously, we reserve the right to change specifications without prior notice.

■ **DISPOSAL**

Care should be taken when the machine comes to the end of its working life. All parts should be disposed of in the appropriate place, either recycling or other means as the law permits at the time.

In the UK, The environmental protection act 1990 applies