



MONO Modular Deck Oven with Integrated Prover

EN

Installation and Operation Manual





Product Version

- UK specification
- Eco-touch control
- Prover base unit

Enter Serial Nos. here.

Deck 1
Deck 2
Deck 3

In the event of an enquiry please quote these serial numbers.

Safety symbols

The following safety symbols are used throughout this document and manual (available at <u>www.monoequip.com</u>). Before using your new equipment, read the instruction manual carefully and pay special attention to information marked with the following symbols

Warning!	Indicates a hazardous situation that, if not avoided, could result in death or severe injury.
Warning!	Indicates a hazardous situation that, if not avoided, could result in death or severe injury.
Caution!	Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

Electrical safety and advice regarding supplementary electrical protection

Commercial bakeries, kitchens and food service areas are environments where electrical appliances may be located close to liquids, or operate in and around damp conditions, or where restricted movement for installation and service is evident.

The installation and periodic inspection of the appliance should only be undertaken by a qualified, skilled and competent electrician, and connected to the correct supply suitable for the load as stipulated by the appliance data label.

The electrical installation and connections should meet the necessary requirements of the local electrical wiring regulations and any electrical safety guidelines.

We Recommend:

- Supplementary electrical protection with the use of a residual current device (RCD)
- Fixed wiring appliances incorporate a locally situated switch disconnector to connect to, which is easily accessible for switching off and safe isolation purposes. The switch disconnector must meet the specification requirements of IEC 60947.

Your attention is drawn to:

BS 7671:2018 – Guidance Note 8 – 8.13 : Other locations of increased risk

It is recognised that there may be locations of increased risk of electrical shock other than those specifically addressed in Part 7 of BS 7671. Examples of such locations could include laundries where there are washing and drying machines in close proximity, and water is present, and commercial kitchens with stainless steel units, where once again, water is present. Where, because of the perception of additional risks being likely, the installation designer decides that an installation or location warrants further protective measures, the options available includes:

- Automatic Disconnection of Supply (ADS) by means of a residual current device having a residual operating current not exceeding 30 mA;
- Supplementary protective equipotential bonding; and
- Reduction of maximum fault clearance time.

The provision of RCDs and supplementary bonding must be specified by the host organisation's appointed installation designer or electrical contractor and installed by a suitably qualified and competent electrician so as to comply with Regulations 419.2 and 544.2.



The supply to this machine must be protected by a 30mA RCD



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

Signed	CHAD Whows.		
G.A. Williams – Quality Manager			
Date			
Machine FG Code.	Machine Serial No.		

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

Important notes

Warning!	 A 30mA RCD must protect the supply to this machine.
	 To reduce the risk of fire or electric shock, do not remove covers (or back sheeting). There are no user-serviceable parts inside. Repairs should be done by authorised personnel only.
Caution!	 Be aware of hot surfaces.
	 Do not touch the front with bare skin.
	 Failure to adhere to the cleaning and maintenance instructions detailed in this manual could affect the warranty of this machine.
	 The oven should only be used for baking bread, pastries, and cakes.
	 Some sections of this manual are for engineers only and the customer should not attempt to make any alterations.

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1. Introduction

The electric modular 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 completely reliable

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

Top-quality specification

The external and internal contact surfaces are stainless steel.

Each modular deck has durable reinforced one-piece tiles and increased high-grade insulation and high-temperature ceramic sealant to make the oven more efficient.

The oven comes with a patented integral steaming system, which reduces energy consumption and the overall size of the oven. The system produces natural steam with the advantages of spray steam. Pre-steam is also available to reduce the effects of long loading times.

No drainage is required.

Eco-touch ovens are supplied with **TOUCH** displays for user-friendly control. This display can show pictures of product types or program numbers that have been set by the user. When not being used, the screen can show your company logo. A voice-prompt facility is also available for basic instructions like "Bake over".





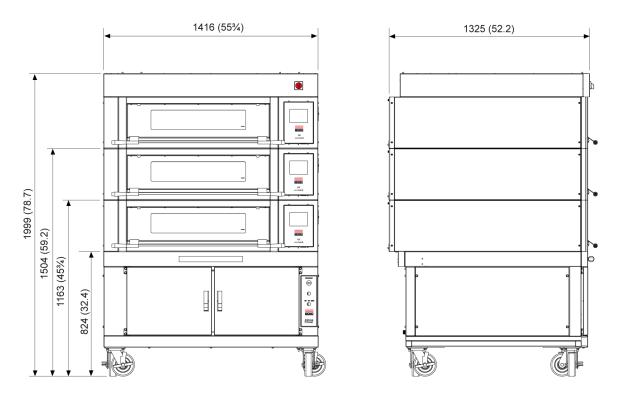
The lights are low voltage, sealed from the chamber and easily accessed from outside the oven.

Fitted with a choice of hinged easy to clean glazed doors (using low energy-loss reflective glass for high visibility) or metal doors, means low energy consumption and the high kW rating gives good recovery. (0-100% heating available both top and bottom).

ECOTOUCH SCREEN CONTROLS

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

2. Overall Dimensions



Note: All dimensions are in mm (inches) and are approximated.

Oven 2-trays wide	
Width	1416 mm (55¾ inches)
Depth including handles	1325 mm (52.2 inches)
Height (to first deck)	824 mm (32.4 inches)

Prover	
Number of trays	8
Size of trays	600 mm x 400 mm

3. Specifications

Electrical specifications

Warning! • Separate electrical supplies to each deck and the prover base must have their own 30mA Residual Current Device (RCD).

Table 1: Electrical loading per modular deck (2 trays wide)

Voltage	Power		
400 Vac (50 Hz), 3-phase + neutral + earth	6 kW, 9 Amps		

Table 2: Electrical loading for prover unit

Voltage	Power	
230 Vac (50 Hz), 1-phase	1.8 kW, 8 Amps	

Environmental specifications

The noise level is less than 80 dB.

Mechanical specifications

Table 3: Weights for standard-size deck oven

Specification	Nominal trave wide	Modular decks	Weight ⁽²⁾	
	cification Nominal trays wide Modular decks		Lbs	Kg
Total oven weight (including base prover)	2	3	(1)	(1)
Weight per oven chamber module	2	-	421	191.5
Weight per oven canopy module	2	-	31	14
Weight per fan module	2	-	62	28
Weight of product (maximum) per deck	2	-	86	39
Weight of prover	2	-	(1)	(1)

⁽¹⁾ To be advised. Contact Mono Equipment for information.

⁽²⁾ All weights are approximate.

4. Safety

-

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The Bakery Manager or Supervisor must carry out daily safety checks. Bakery staff **must not**, under any circumstances, remove panels to access any part of the oven.

Only fully-trained and authorised persons are permitted to do any work on the oven. Authorised electricians must carry out all repairs and maintenance of electrical units. Always disconnect or isolate the power supply before starting any maintenance (i.e. opening panels) or cleaning work on the oven.

Warning! Before using the oven, check that		 Before using the oven, check that: 		
	 All cover panels and pipe fittings are secure. 			
	 The door handles are not damaged. 			
		 If the oven is damaged or malfunctioning, stop using it. 		
		 Do not attempt any repairs. 		
		 Contact the Mono Service Department for advice. 		
		 Fit only MONO spare parts to this oven. 		
		 All connections to the oven must comply with the statuary requirements of the country of installation. 		
		 Operate the oven only as described in this manual. 		
4	Warning!	 Separate electrical supplies to each deck and the prover base must have their own 30mA Residual Current Device (RCD). 		
		 Always fit a wall isolator to isolate the oven completely. The isolator must be visible, labelled, and easily accessible by an operator. 		
•				
Caution! • B	 Be aware of hot surfaces: 			
		 Always use oven gloves when loading or unloading the oven. 		
		 Allow time for the oven to cool down before cleaning it. To prevent door glass from shattering, do not clean the oven glass when hot. 		
		 While the oven is in operation (and for some time after use), it is inadvisable to touch the oven window or the surrounds because of conducted heat. 		
		 The oven owner is legally obliged to instruct staff on these safety points and the safe operation of the oven. Therefore, these instructions should not be removed from the working area. 		
		 Do not store items on top of or behind the oven. 		
		 Only use the oven for baking bread, pastries, and cakes. Contact Mono Equipment for other product-making machines. 		
		 No unauthorised modifications to the oven are permitted. Only use MONO spare parts. 		

5. Installation

General

• A hard smooth level floor is recommended on which to position the oven and access for maintenance should be considered.

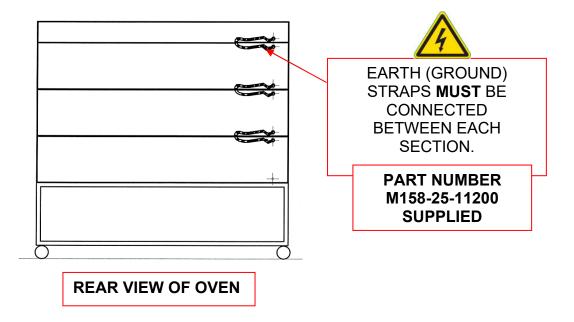
The oven is not designed to be "built in" so sufficient clearance <u>must</u> be left in front of the access panels (right hand side) to allow for servicing.

- If not chosen as an oven option, it is recommended that an extraction hood be placed above the oven to disperse excess steam and heat, which could have an adverse effect on the bakery ceiling and ambient temperature.
- A chain retainer should be fitted, that is shorter than the power cables, to protect them from strain if the oven is moved. (Fit to the wall or floor and the base, using hole provided in castor fixing corner plates).
- Installation must be made by a trained authorised engineer and all utilities must conform to all local regulations.

Electrical connections

- The main connection point for all deck supplies is at the top of the oven.
- A wall isolator must be available in order to completely isolate the oven. This isolator must be clearly accessible to the oven operator.
- Read the Safety section on page 11.
- Electrical loadings are in the Specifications section.

Important operation



Water supply requirements

Note

The set up procedure on the next page must be followed to allow the steaming system to function correctly.

Oven

- All ovens with a steam function require a ³/₄" BSP hot or cold water supply at a pressure of 2 3 bar (29 – 44 psi). The water supply should comply with local water regulations.
- A manifold supplies all decks from one connection point.
- For proper operation of the steam system, it is recommended that the water supply also has the following specifications:

Hardness	0 – 4 grains per gallon
PH range	7.0 to 8.5
Chloride concentration	0 – 20 ppm

Consult Mono for proper water filtration system information.

- No drain is required for this oven.
- A non-return check-valve is supplied fitted to the water inlet manifold.

Prover

- The Prover requires a ³/₄" BSP cold water supply at a pressure of 2 3 bar (29 44 psi).
- Washing machine type hose

Oven water system setup procedure



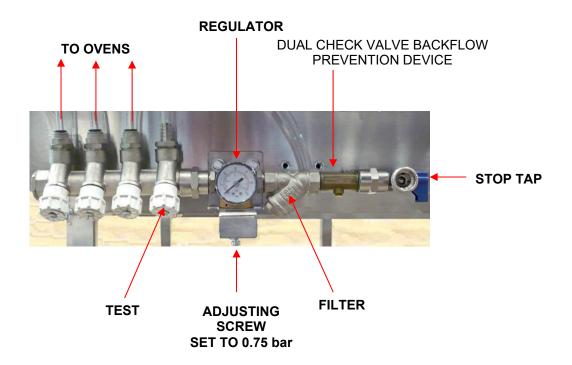
It is imperative that the water delivery to the deck oven is checked for the steam system to operate correctly.

Note that dynamic pressure, not static pressure, is being measured.

Procedure

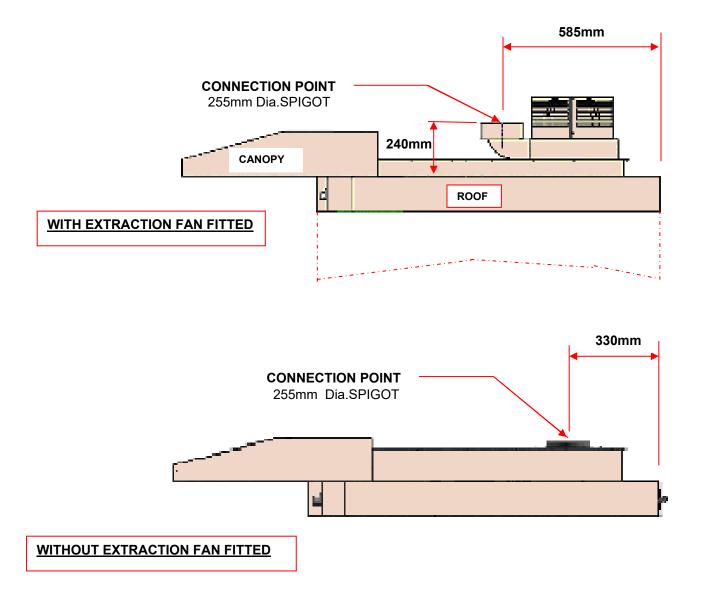
- 1. Flush out the main feed pipe to be used until water runs clear and free from debris.
- 2. Connect the main feed to the oven.
- 3. Connect flexible hoses to each deck.
- 4. Place a container under the test valve (A).
- 5. Slowly open test valve (A) fully and, with the water flowing, set the regulator (C) to 0.75 bar using the screw underneath (B).
 - Never use the oven above this setting.
- 6. When the pressure has stabilised, shut the test valve (A).
- 7. Repeat steps 4 to 6 at the end of the installation.

Figure 1: Water regulator setup (located on rear of oven)



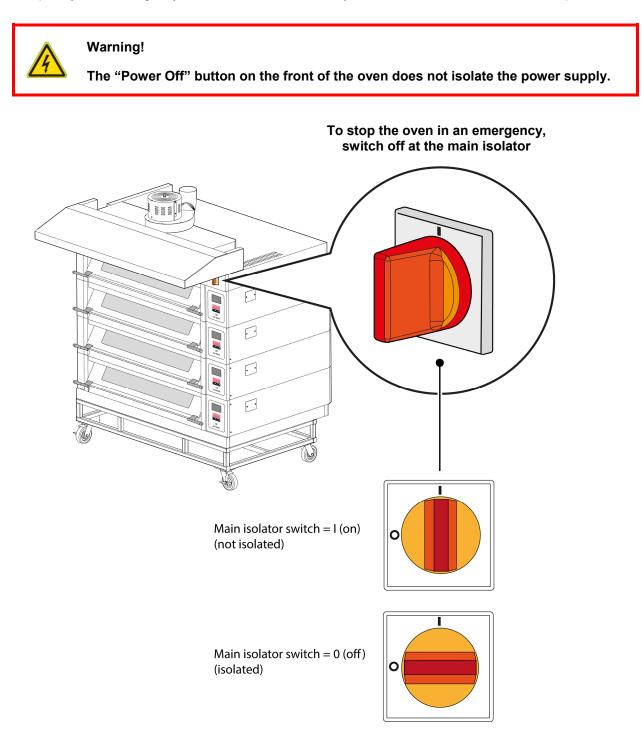
Exhaust Connections (if canopy fitted)

- Ideally, an exhaust duct should rise 2 metres above the bakery roof and be protected from wind and birds by a duct protector.
- It should be of a suitable material to take the high temperatures and humidity expected.
- It should be flexible and easily removable at the oven connection point. *This allows the oven to be moved for cleaning when required.*



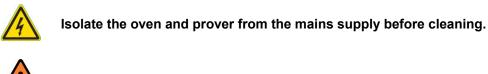
6. Isolation

A wall isolator, rated for the specific model of oven installed, must be available to isolate the oven completely in an emergency. The isolator must be clearly accessible and known to the oven operator.



7. Cleaning

Daily cleaning instructions



Take care water does not enter the control-panel mounting or roof-mounting fan.

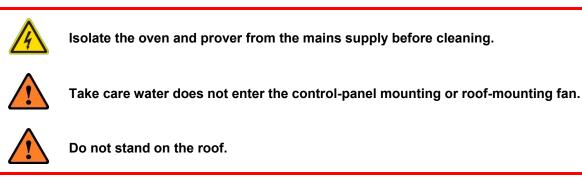
Procedure

1. Sweep any debris out of the oven and prover **after** they have been allowed to cool.

Note: Use a vacuum cleaner with metal attachments (i.e. able to take the heat), if available.

- **2.** Brush and scrape off any flour and dough adhering to the prover cabinet inner surfaces. Use only a stiff brush or plastic scraper.
- **3.** Brush down and wipe oven front, back and sides with a damp cloth.
- 4. Spot clean outside 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 and switches.

Weekly cleaning instructions



Procedure

- 1. Complete the daily cleaning procedure, as above.
- Use a nylon brush to scrub the wheels with a mild detergent and hot water.
 Note: Using too much water eventually rusts the metalwork.
- 3. Ensure the oven roof area is clear of debris and dust build-up.

8. Operating conditions

- Leave a clear space of at least 2 metres (6 ft.) in front of the oven for ease of operation and safety reasons.
- Do not use bakery utensils to operate the control panel buttons.

9. Principal of Oven Operation

Note

Operators should refer to their own company's recipe manual for the oven temperature settings.

Baking heat

Products bake in an insulated, heated chamber with the temperature regulated by a thermocouple. A digital temperature read-out is visible on the control panel screen. Baking heat is radiant, with top and bottom heat adjustable by separate controls. This technology enables heat to be "balanced" according to product requirements.

Steaming function

Steam is provided from an integral steam unit and injected into the chamber on demand. Programmed parameters automatically control this function.

After being steamed, the oven does not allow more steaming until the steam unit has recovered heat, typically for 3 to 10 minutes, depending on the selected program.

All deck ovens have a steam damper that evacuates steam humidity into a vent at the rear of the oven.

Baking advice

Advice for getting the best results from deck ovens:

Loading

- **1.** Do not place the products too close together. If the loaves are close to each other after the oven spring (expansion), it results in soft sides and may collapse on cooling.
- **2.** Place the product evenly within the oven. Products bunched together are paler than those widely spaced.
- **3. Products should not be too close to the edge of the tile**. As it expands towards the front, one side of the loaf may enter the cooler air by the door.
- 4. Door-opening should be kept to a minimum because cold air enters the oven. Cooling of the sidewalls and roof causes the finished product to be lighter locally at the front and wastes heat. If loading times are consistently long, alter the front-top heat to put more heat at the front.
- **5.** The product can form a skin if the loading takes a long time, which causes an imbalance and a less attractive finish. By using the pre-steam function before loading, this can be minimised. The steam function turns the elements off and injects steam to increase the humidity.

Bake settings

1. A good starting point for baking bread in Mono deck ovens is 225 °C (437 °F).

Top heat:	60 to 65	Bottom heat:	40
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- **2.** For cookies (and similar products), the oven's heat can be turned almost off. However, it may still be necessary to place the trays with, e.g. cookies, onto upturned trays on the oven sole.
- 3. Steam should be kept to a minimum for energy efficiency, depending on the product and finish. Times of between 9 and 12 seconds should be adequate. It is a good idea not to focus on the temperature recovery this can vary from oven to oven.

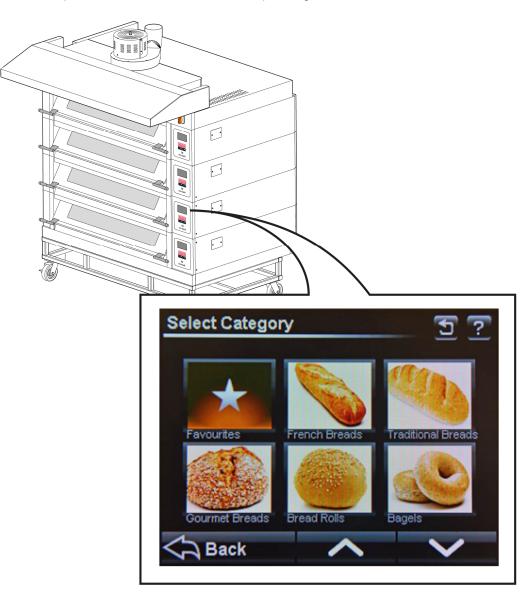
Is the product baked in the time and to the quality you require?

Below are some tips for modifying the bake to get the product that you require.

- If your product is **light on top**, decrease the bottom heat and extend bake time or increase the top heat.
- If the product **sides are pale** and the **top dark**, space the products well apart, drop the top heat, and extend the bake time.
- If the bake time is too long, first increase the top heat to speed recovery. If this does not give sufficient savings, increase the baking temperature.
- **To thicken the crust**, set the damper to be open for longer. Different ovens require different lengths of time.

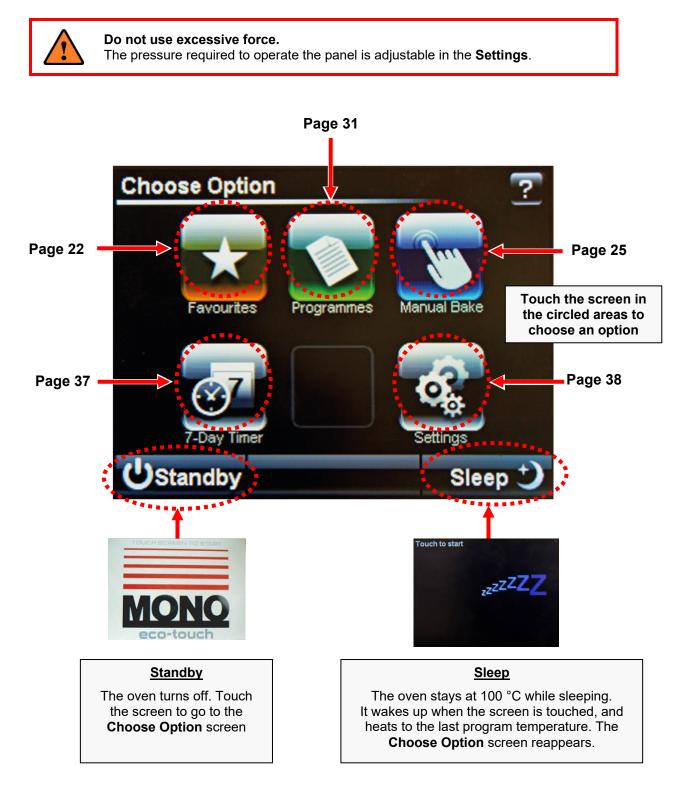
10. Touchscreen Operation

Each deck has an independent, colour touchscreen for operating the oven.

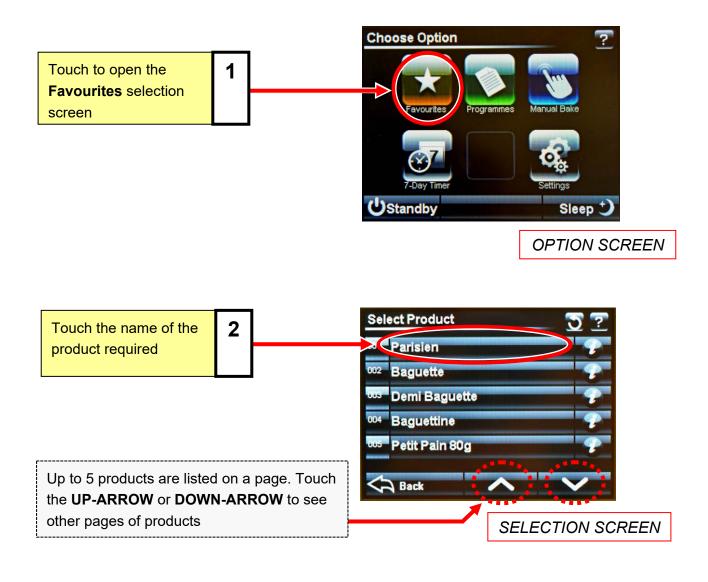


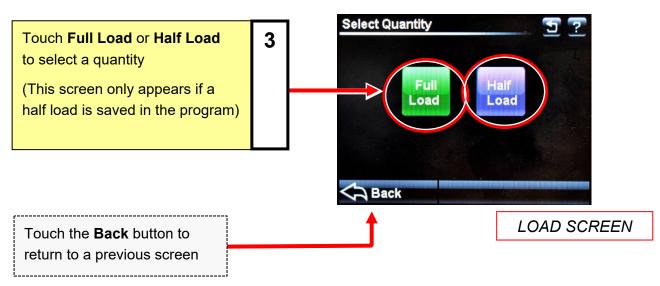
Basic operation

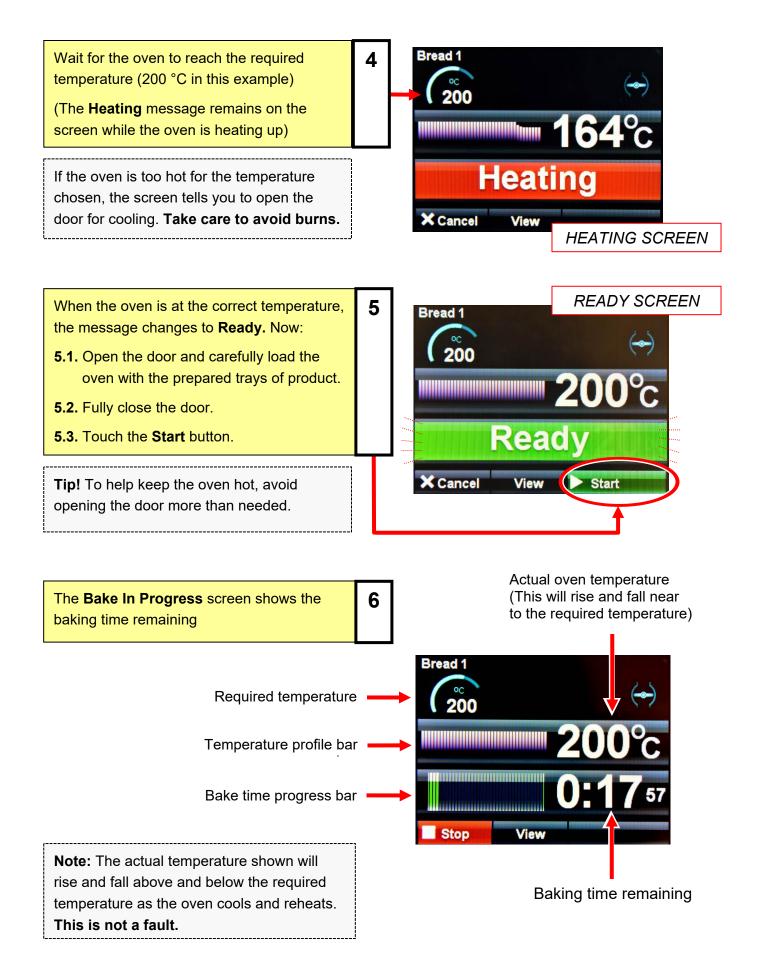
Operations are performed by touching an area of the screen, bringing up the next information panel or activating a function.

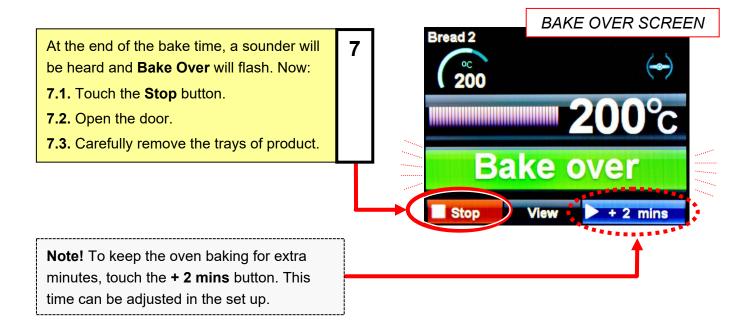


Baking using the "Favourites" menu

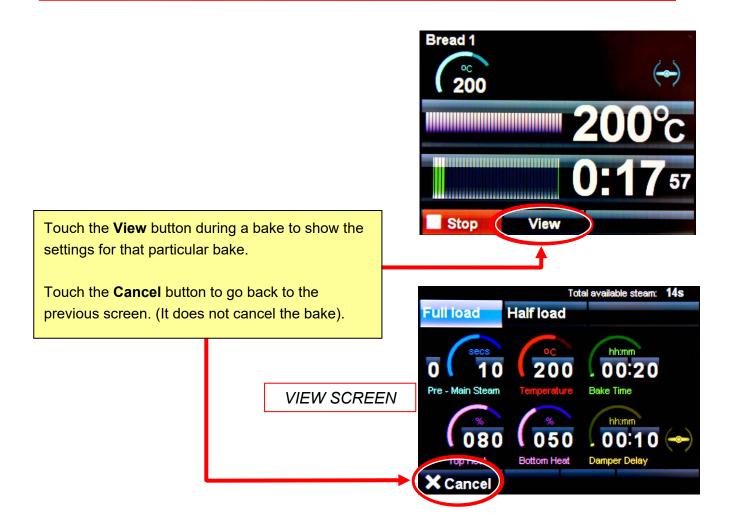




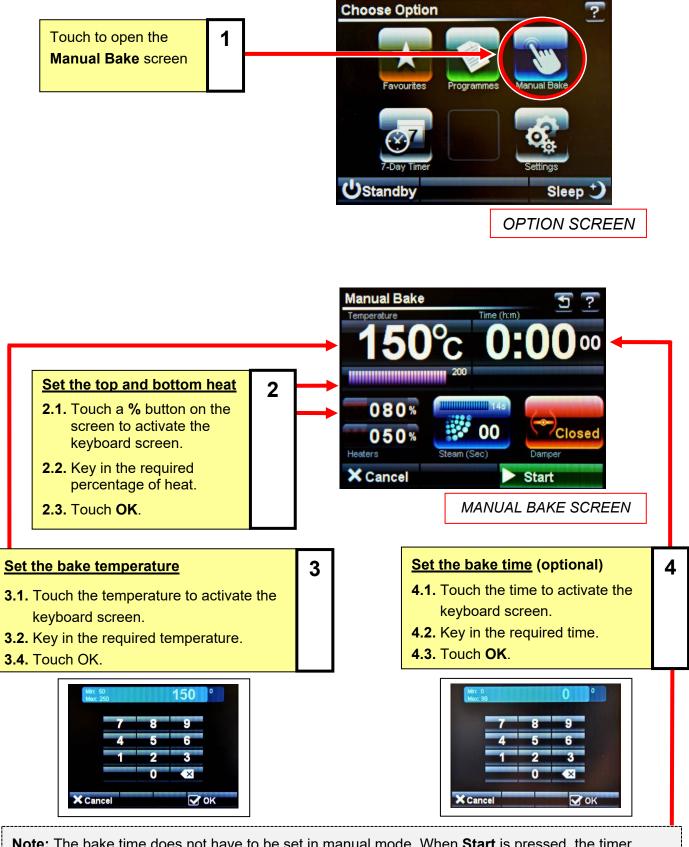




Touching the View button during a bake (optional)

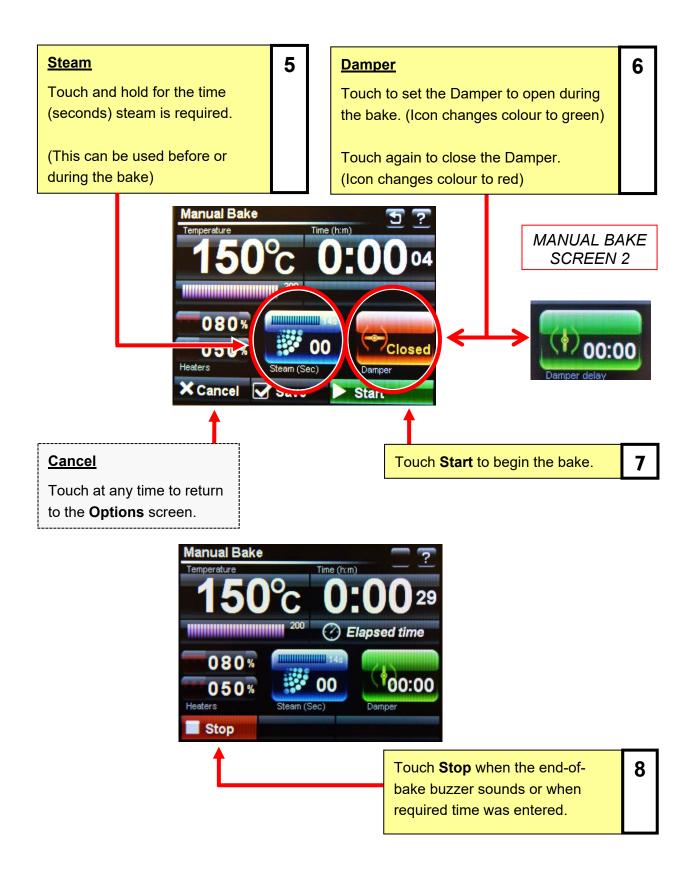


Baking using the "Manual Bake" menu

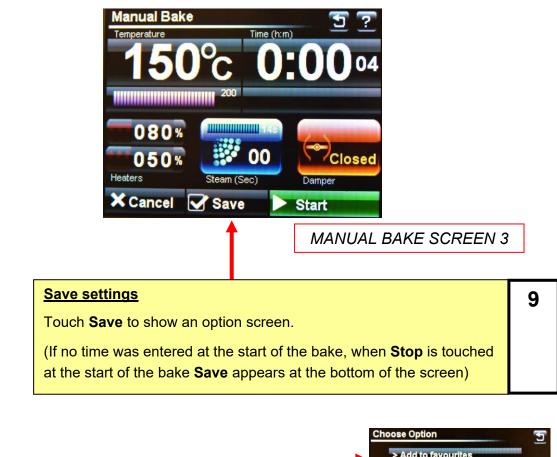


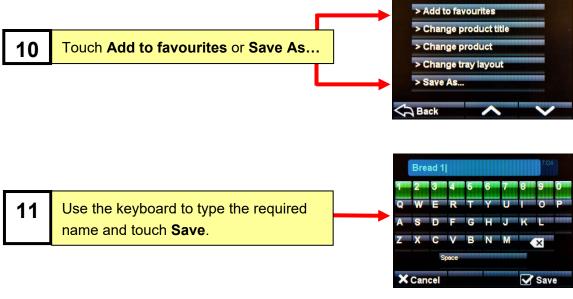
Note: The bake time does not have to be set in manual mode. When **Start** is pressed, the timer increases instead of counting down. Touch **Stop** to finish the bake.

(Manual Bake)



Save (keep) the Manual Bake Program



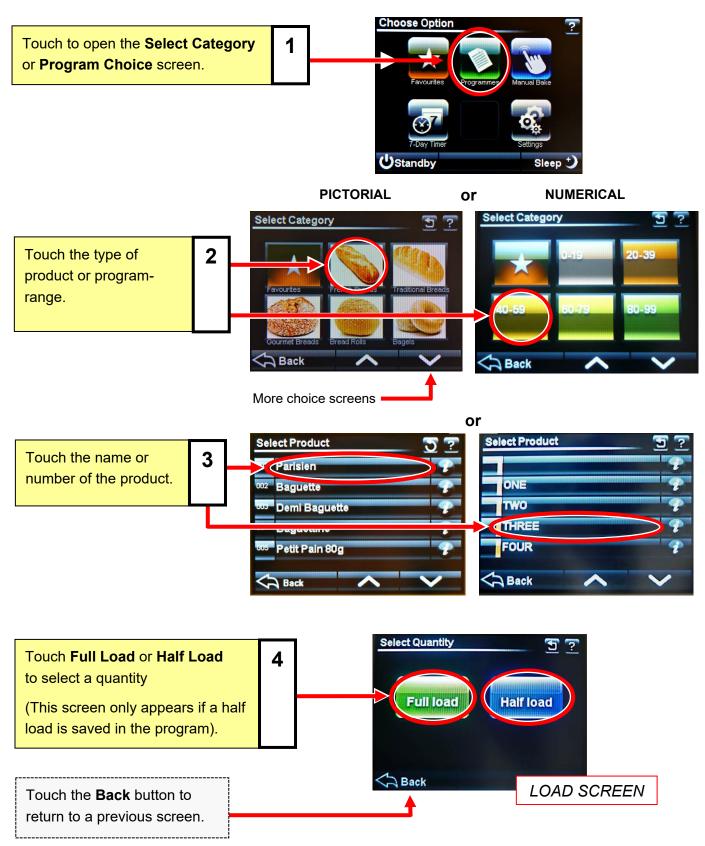


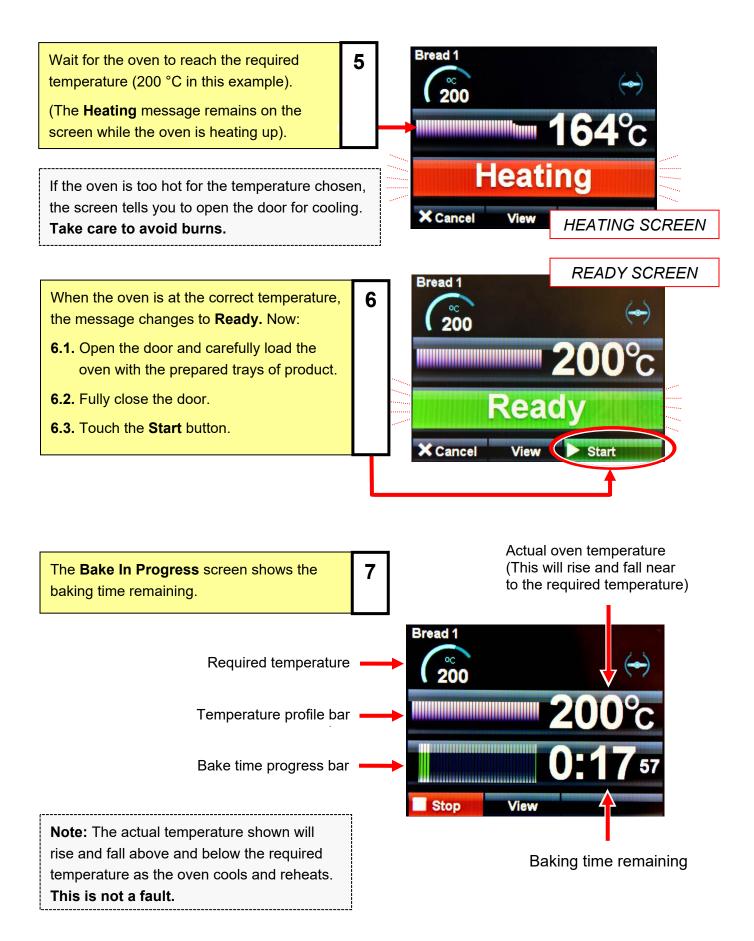
Note: In manual mode, only one operation of the steam or damper is saved.

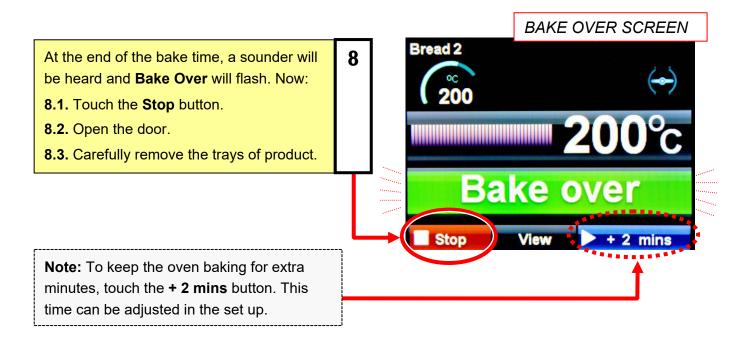
Baking using the "Programmes" menu

Note: This manual covers two versions of the firmware. (The oven is pre-set to show one only).

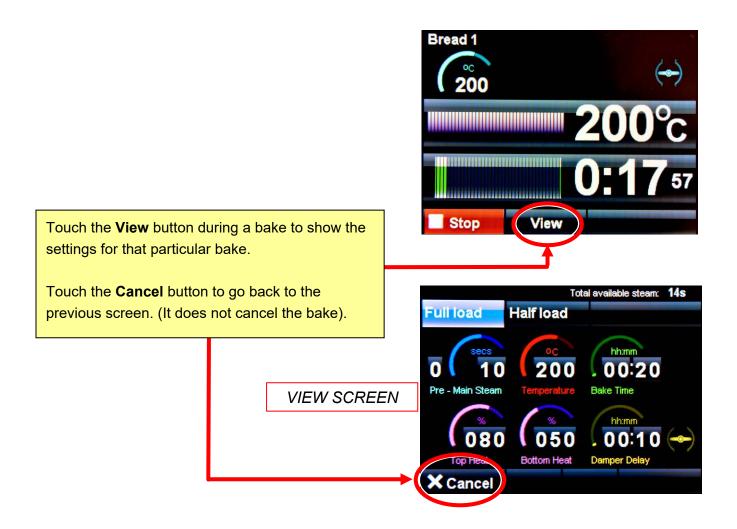
- PICTORIAL version shows choices of product categories
- NUMERICAL version shows ranges of program numbers



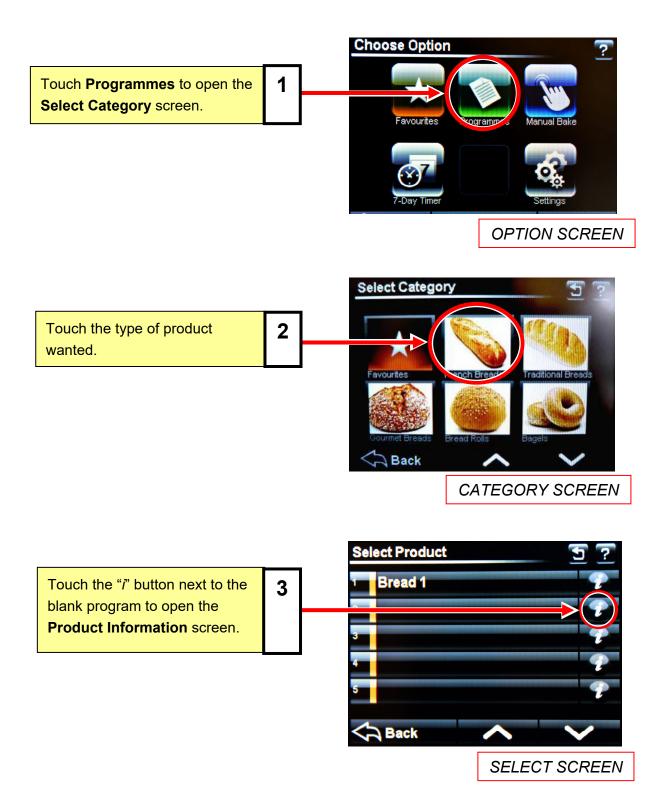




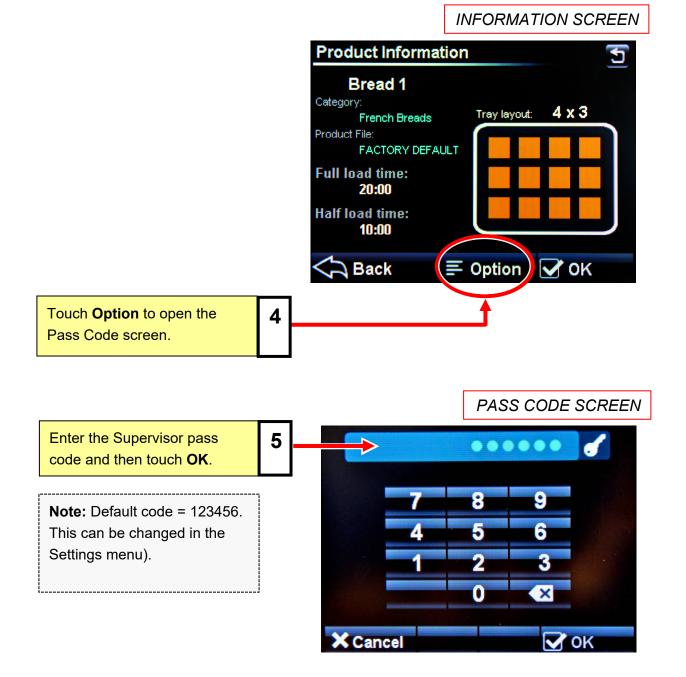
Touching the View button during a bake (optional)



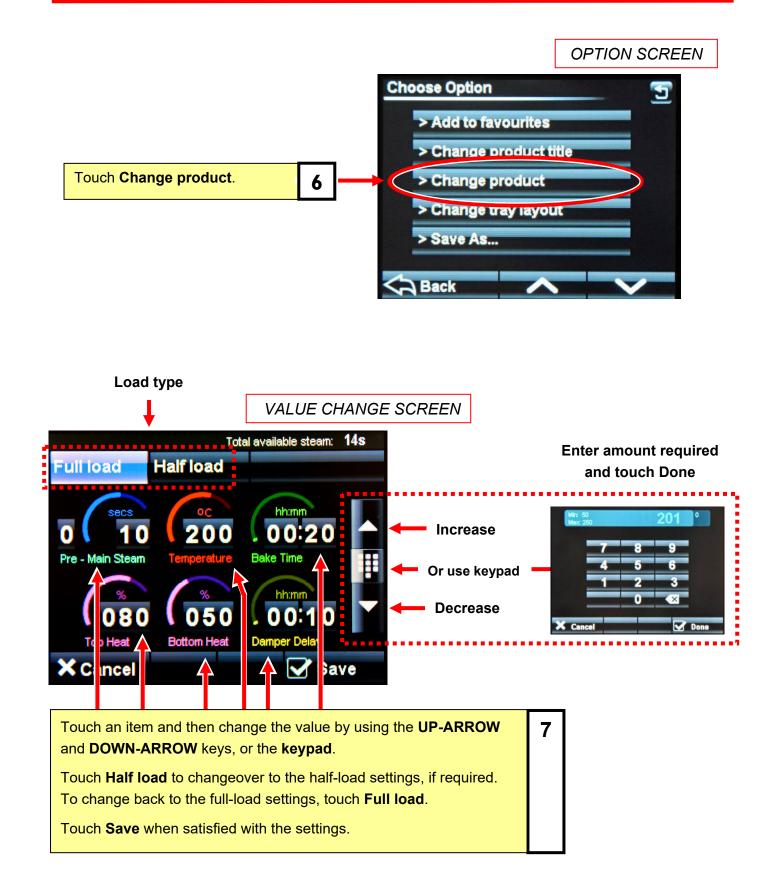
Creating a bake program



(Creating a Bake Program)

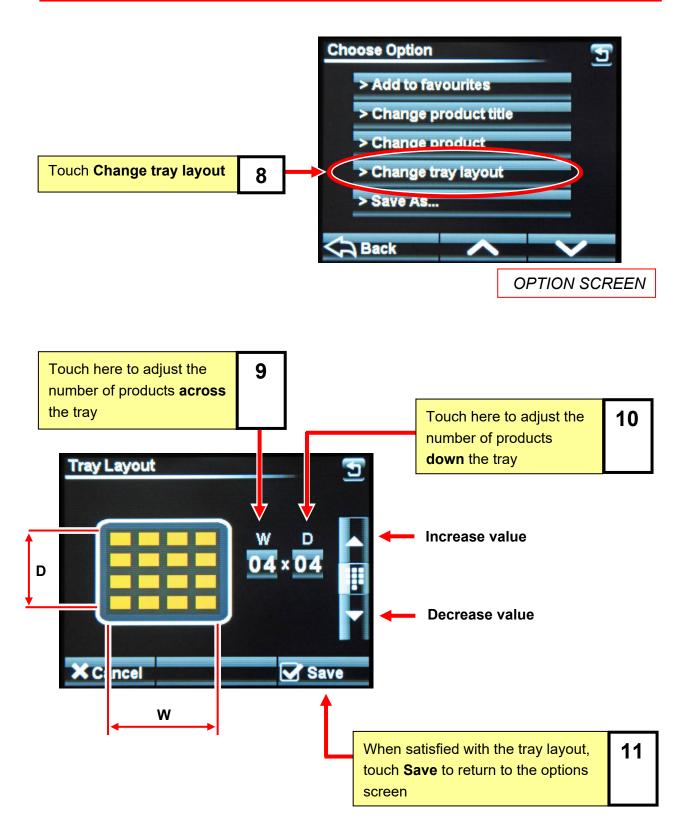


Enter the product bake details



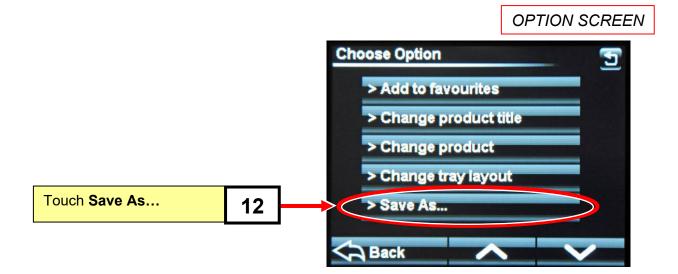
Changing the tray layout

(Creating a Bake Program)



Save the product

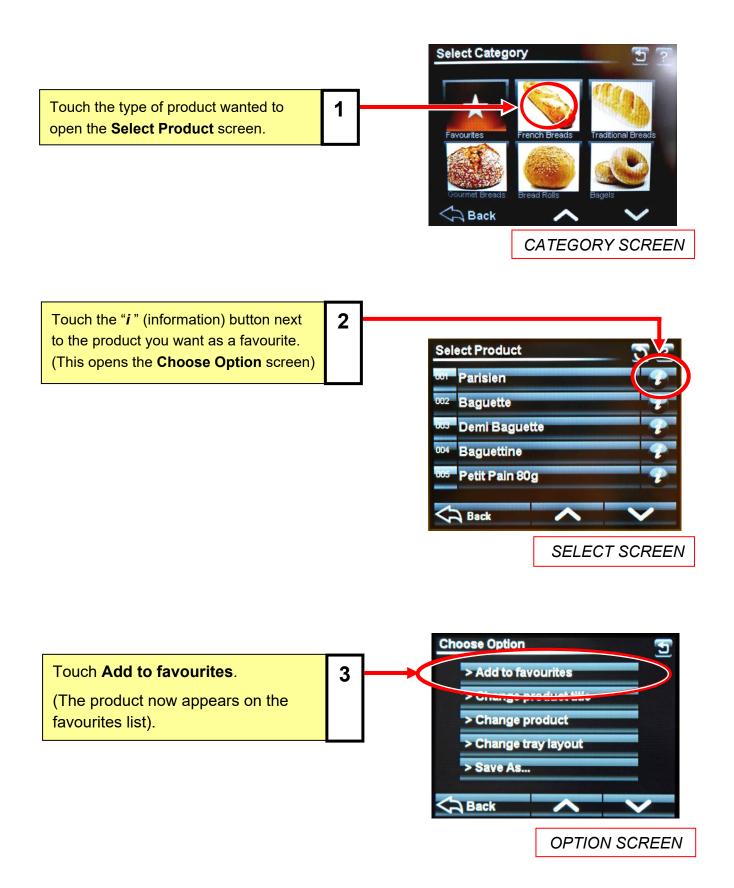
(Creating a Bake Program)



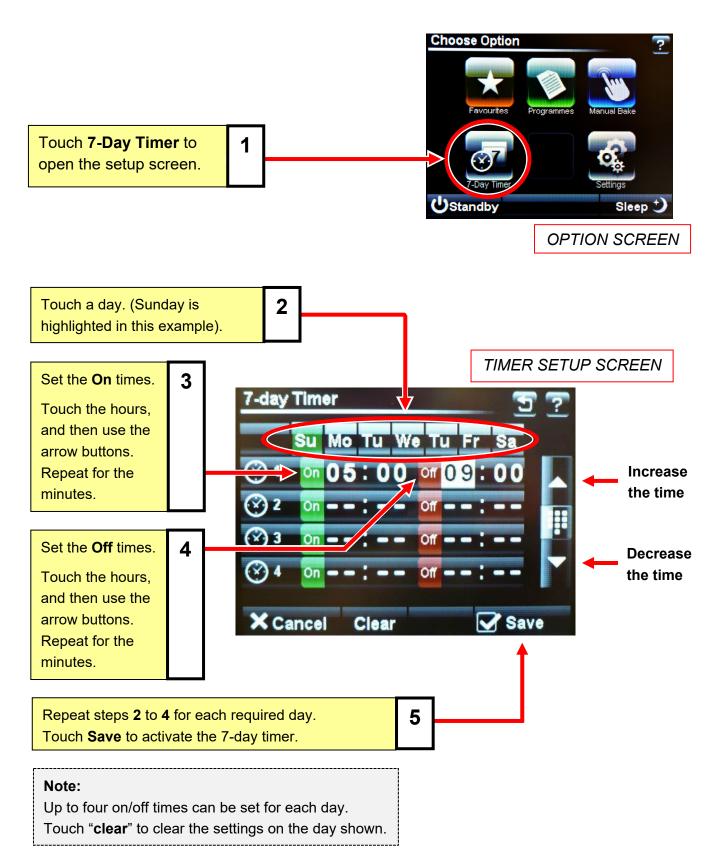
KEYBOARD SCREEN



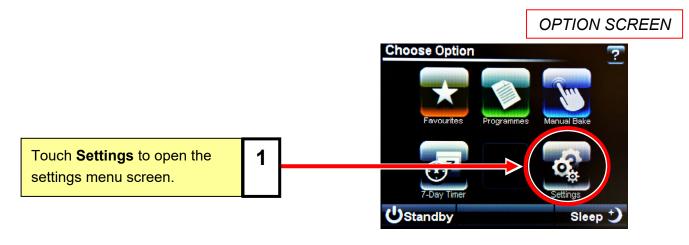
Add a product to the favourites list (optional)



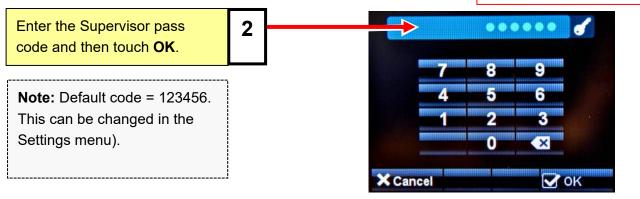
7-day timer

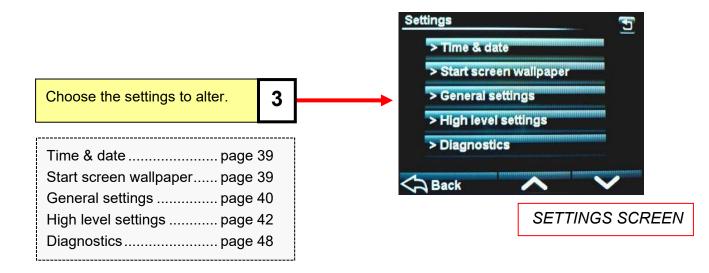


Settings

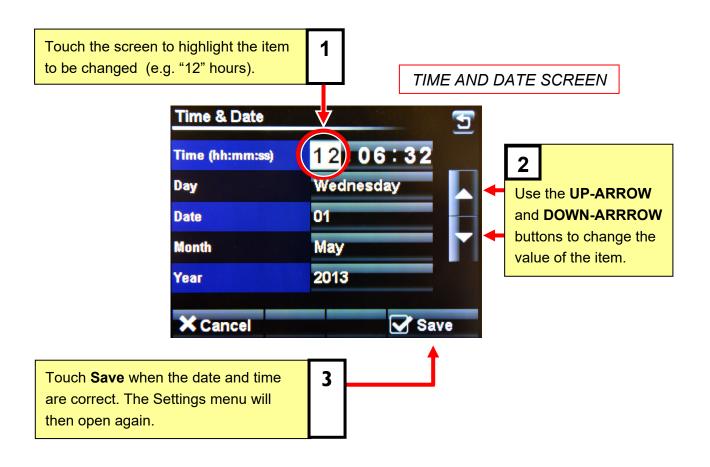


PASS CODE SCREEN





Set time and date



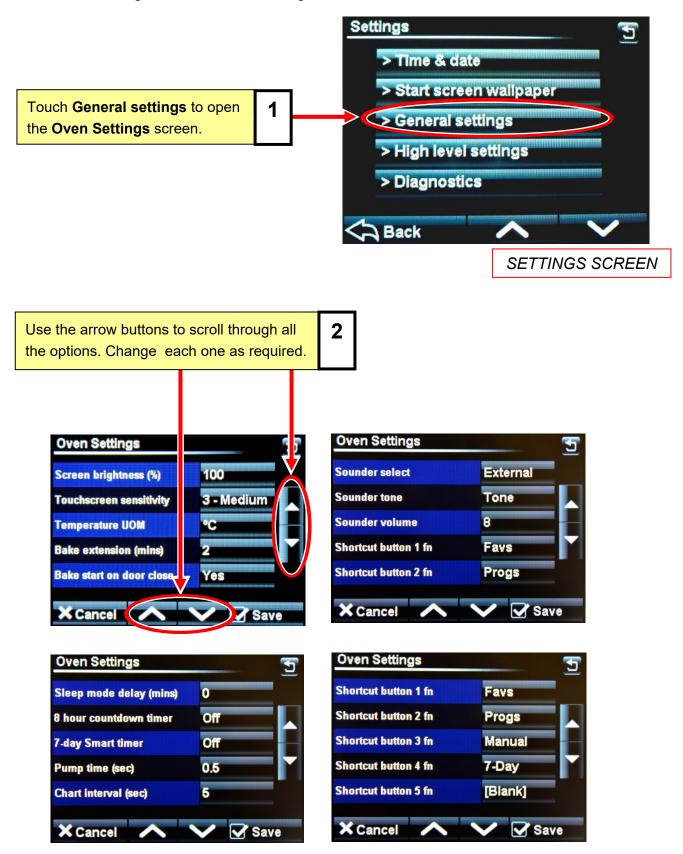
Select a wallpaper for the start screen

(Settings)



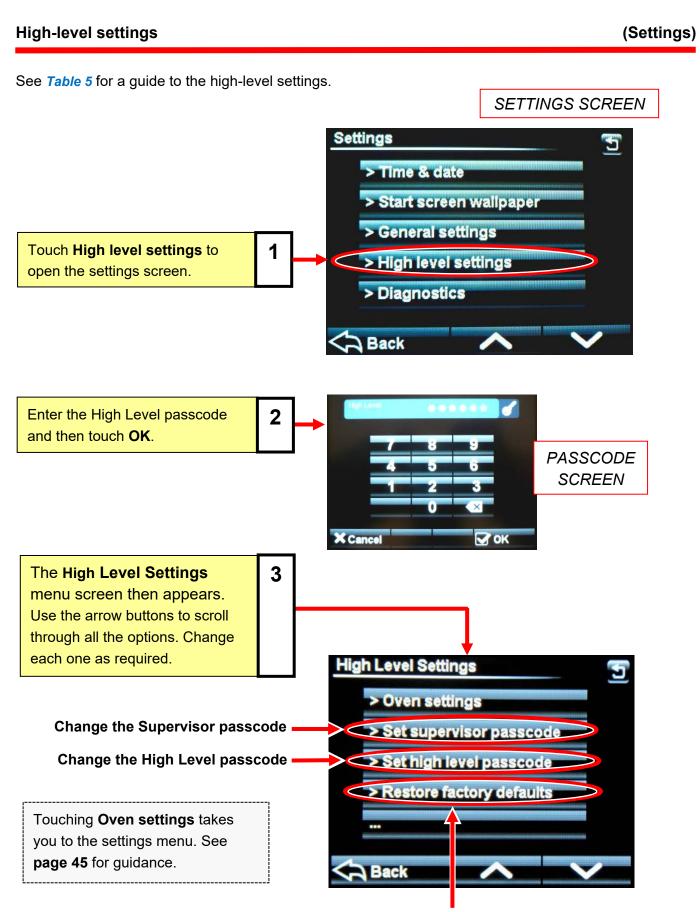
General oven settings

See Table 4 for a guide to each oven setting.



Over extring Exploration of the extringe			
Oven setting	Explanation of the settings	Default	
Screen brightness	Adjusts the brightness level of the viewing screen. Settings are 5 to 100.	100	
Touchscreen sensitivity	Adjusts the pressure required to operate the touch screen. (5 levels of sensitivity)	3 - Medium	
Temperature unit of measure	Centigrade (Celsius) or Fahrenheit. Settings are ° C and ° F .	°C	
Bake extension (minutes)	Adjusts the extra time at the end of a bake for each "extra time" button touch. Settings are 0 to 10 minutes.	2	
Reselect product after bake	Resumes with the same product program without having to reselect it. Settings are Yes and No .	Yes	
Sleep mode delay	The oven goes into sleep mode after the set minutes, providing it is up to temperature and has been through at least one bake cycle. Settings are 0 to 60 .		
8-hour countdown timer	After 8 hours, the oven gives a warning and then turns off. Touch any button for an extra hour, if required. Off / On .	Off	
7-day Smart timer	Smart timerOn = 7 -day timer fuction.Off = Controls set start time depending on oven temperature.		
Pump time (sec)	The time (sec) Increase pipe pressure before steaming. Settings 0.0 to 3.0 .		
Chart interval (sec)	Chart interval (sec)Time interval in seconds that the bars show on the heat and bake time progress charts. Settings are 1 to 60.		
Sounder select Set as External or Onboard sounder.		External	
Sounder tone	Select a tone – Voice , Tone , or Off .	Tone	
Sounder volumeAdjust to suit the volume required for the onboard sounder.Settings are 0 to 15.		8	
Shortcut buttons 1 fn to 5 fn	It gives the choice of what buttons are active and in which order they appear on the options screen. Settings are Fav (Favourites), Progs (Programs), Manual bake, Multi bake, 7-Day timer, and [Blank] (not used). (Settings for 6 fn cannot be changed)	1 fn = Fav 2 fn = Progs 3 fn = Manual 4 fn = 7-Day 5 fn = [Blank]	
Door open alarm	Turns the alarm on or off for when the door is opened during baking. Settings are On and Off .	On	

Table 4: Oven settings explained (general level)

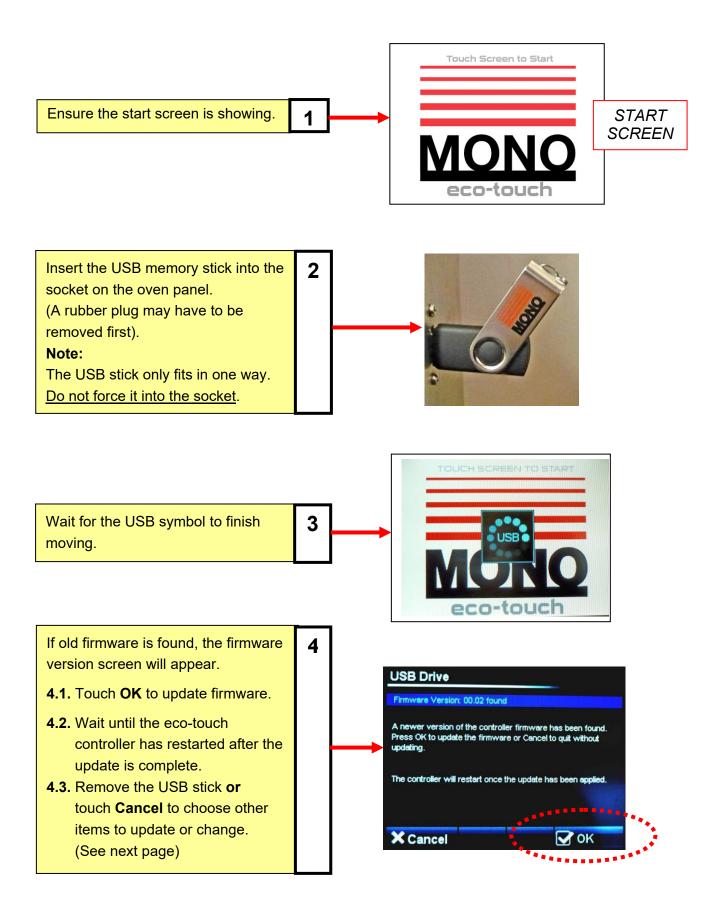


Restores all screens to original (factory default) settings

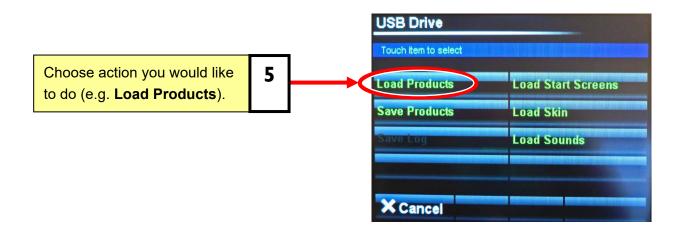
Oven setting	Explanation of the settings	Default
Oven type	Always fixed to DX for this oven.	DX
Maximum bake temperature	It can be set from 250 °C (480 °F) up to 300 °C (572 °F).	250 (°C) or 480 (°F)
Temperature offset	Adjusts the display of the actual temperature in the oven. Usually, this is kept set to 0 .	0
Bake hysteresis	Sets bake temperature cycling around a set point. (Above and below. Settings for above/below thresholds are 1 to 20 .	2
Bake cycle setpoint only	No = Shows the set temperature point and actual temperatures on screen Yes = Shows the set temperature point only	No
Manual default temperature	Set for manual program default temperature.	150 (°C) or 302 (°F)
Sleep fallback	Sleep fallbackSet the temperature required to be maintained by the oven while sleeping. Setting are 100 to 200 (°C) / 212 to 392 (°F).	
Sleep hysteresisKeeps "sleep mode" temperature cycling around a set point. Settings for above/below thresholds are 1 to 20 (°C).		2 (°C)
Ready accept high	The highest temperature for the oven to display "Ready".	15
Ready accept low	The lowest temperature for the oven to display "Ready".	-10
Steam type Plate or Spray – but keep this set to Plate.		Plate
Top gain Top and bottom heat gains.		50 (°C) or
Bottom gain	Settings are 0 to 255 °C (32 to 491 °F)	122 (°F)
Mono constant	Factory set. Do not change unless instructed to do so.	
Steam trough temp.	rough temp. Not applicable to this oven.	
Steam hysteresis	Not applicable to this oven.	
Steam trough accept	Not applicable to this oven.	
Light output soft start	ight output soft start Some lights need this for a cold start-up to stop them blowing.	
Heater control	Always fixed to the Contactor setting for this oven.	Contactor
I/P diagnostic	c Displays inputs and outputs at the top of the screen to aid fault-finding.	

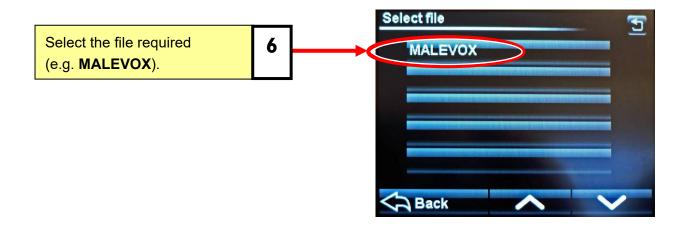
Table 5: Oven settings explained (high level)

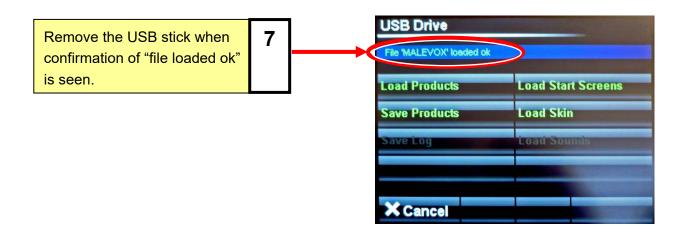
11. Using the USB port



Other items to update







Notes on using USB sticks

For a USB stick (pen drive) to function correctly on a Mono oven with a port, it must have the following folder structure as a root folder.

Mono

(Create 5 sub-folders within the **Mono** folder) Firmware Products Skins Sounds Startup

The oven automatically finds the **Mono** folder after plugging the USB stick into the port. Use any USB stick (as it does not need to be blank), but the Mono folder must be in the root.

Place your recipe and product files in the "**Products**" sub-folder. The most used sub-folders are **Product Files, Skins**, and **Startup Screens**.

<u>SKINS</u>

These files control the way the screen looks in different modes.

• Pictorial type skins are for when the screen displays categories using pictures.



• Numerical type skins are for when the screen displays categories using numbers.



PRODUCTS (PROGRAM FILES)

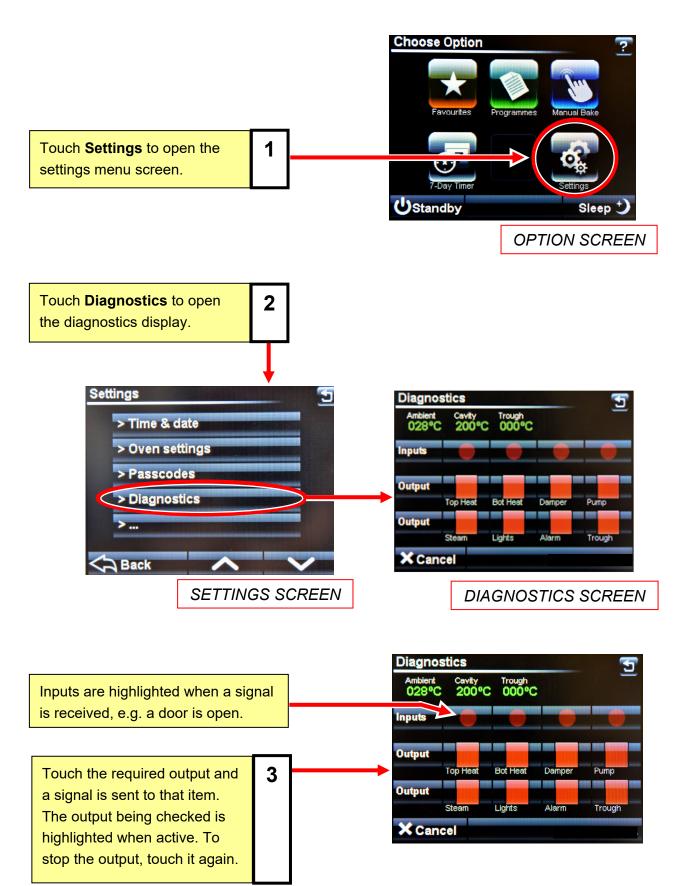
These files contain the information for baking each product, e.g. bread, buns, and cakes.

STARTUP SCREENS

These files show a picture or logo when the oven starts or wakes up.



12. Diagnostics



13. Passcodes

Default passcodes

Table 6: Security level and passcodes

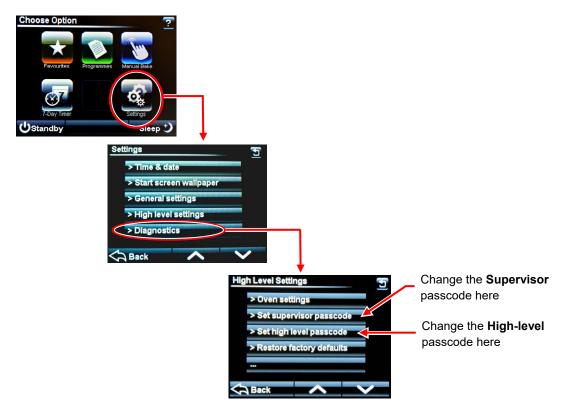
Security level	Passcode
Supervisor (low level)	123456 (default)
High-level	654321 (default)
Master	314159 (fixed)

To stop unauthorised changes to the oven setup, it is suggested that this section is removed from this manual and kept in a safe place for future reference.

If tampering could be a problem, it is a good idea to change the passcodes at regular intervals.

How to change the passcodes

Note: Passcodes are required to navigate through these screens and make changes.



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14. Troubleshooting

None of the decks switched on

- Is the oven's main isolator set to the on (I) position?
- Check if a time clock of the bakery's mains power supply is working (if fitted).
- Is the clock set correctly to power the oven at the required day and time?

One deck has not switched on

• Check if the individual deck timer is to come on at a specific time.

Uneven or patchy bake

- The deck door is open too often or too long whilst loading (front pale, back burnt).
- Uneven loading.
- Faulty element.
- Top or bottom deck elements are not functioning.
- No supply voltage across a phase.

Actual temperature is far exceeding the 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 15 °C (59 °F) difference before diagnosing a fault condition).

Poor recovery of actual temperature after loading

- Doors may have been left open too long during loading, allowing heat to escape.
- Damper may have been left open during loading/baking, allowing heat to escape.
- Top or bottom heat may not be working.
- No supply voltage across a phase.

Steam system not operating correctly

- Is water connected correctly?
- Is the tap to each deck in the on position?
- Has enough time elapsed since the last steaming?

Once steamed, the oven does not steam until the steam unit has recovered heat, typically 3 to 10 minutes depending on the program selected.

15. Service and Spares

Oven spares

Table 7: Oven spares

Spare	Part number
Frosted glass (lights)	257-02-00027
Plain glass (lights)	257-02-00028
Door bumper stop	257-03-00094
Hinge pin, right-hand-side	257-03-00005
Hinge pin, left-hand-side	257-03-00009
Black door handle	A900-27-192
Door spring	257-03-00017
Wire rope	257-03-00024
Spring retaining pin	257-03-00025
Pulley	257-03-00015
Pulley spindle	257-03-00013
Damper drive coupling	257-07-00007
Element gasket	245-02-01300

Spare	Part number
24v 20w Dichroic Lamp	B855-94-008
Top heat element, 0.66 kW	B854-04-102
Top heat element, 0.4 kW	B854-04-100
Bottom heat element, 0.5 kW	B854-04-101

Service information

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



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

Tel. 01792 561234

Spares +44(0)1792 564039 Fax. 01792 561016 Email:mono@monoequip.com

www.monoequip.com

Disposal

When the oven comes to the end of its working life, dispose of parts in the appropriate place by recycling or other means as the law permits at that time.

16. Light Replacement

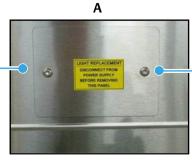


Warning! Disconnect from the supply before replacing light bulbs.

How to replace the 24Vac 20w lamp (part number B855-94-008)

- 1. Unscrew the plate (A) next to the light to be replaced.
 - Keep the hex head socket screws (**B**) safe.





B



2. Slide the fitting out.



3. Remove the light from the holding slot and unclip from the cable.



4. Replace the light and refit all parts.



5. Reconnect the power supply and test.

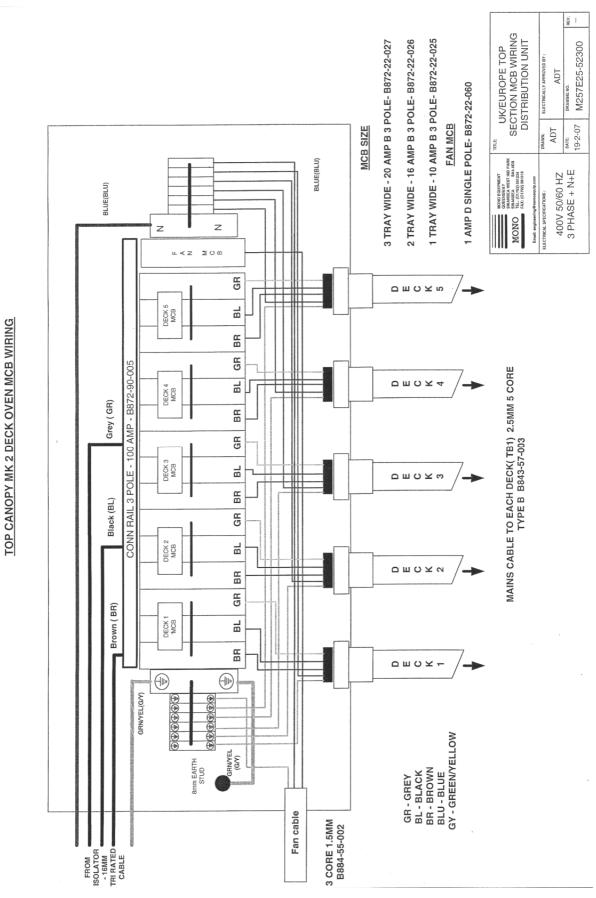
17. Oven Electrics

Table 8: Parts list for the electrical	drawings (3-tray wide)
--	------------------------

Reference in drawing	Description	Part number
F1 (single-phase only)	Heaters MCB	B872-22-007
F2 (single-phase only)	Heaters MCB	B872-22-007
F3 (single-phase only)	Heaters MCB	B872-22-007
F4	Control power supply MCB	B872-22-062
F5	Overheat thermostat	B888-30-014
T1	Control circuit power supply	B801-93-005
K1	Top heat contactor	B801-08-021
K2	Bottom heat contactor	B801-08-021
Y1	Water solenoid (8 mm pipe)	A900-34-365
H1	Interior light	B855-94-008
B1	Oven thermocouple	B873-95-007
U1	Main ECO printed circuit board	158-25-80000
D1	Damper solenoid	B749-83-004
R1	Top heat element, 1.0 kW	B854-04-093
R2	Top heat element, 0.6 kW	B854-04-091
R3	Top heat element, 0.6 kW	B854-04-091
R4	Top heat element, 0.6 kW	B854-04-091
R5	Top heat element, 0.6 kW	B854-04-091
R6	Top heat element, 0.6 kW	B854-04-091
R7	Top heat element, 0.6 kW	B854-04-091
R8	Bottom heat element, 0.75 kW	B854-04-092
R9	Bottom heat element, 0.6 kW	B854-04-091
R10	Bottom heat element, 0.6 kW	B854-04-091
R11	Bottom heat element, 0.6 kW	B854-04-091
R12	Bottom heat element, 0.6 kW	B854-04-091
R13	Bottom heat element, 0.6 kW	B854-04-091
R14	Bottom heat element, 0.6 kW	B854-04-091

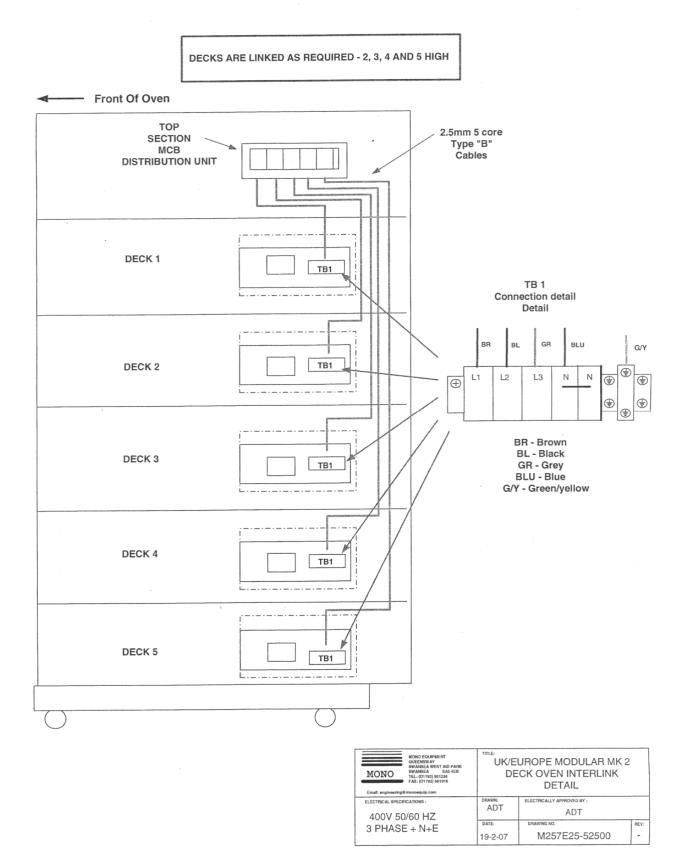
Reference in drawing	Description	Part number
F1 (single-phase only)	Heaters MCB	B872-22-006
F2 (single-phase only)	Heaters MCB	B872-22-006
F3 (single-phase only)	Heaters MCB	B872-22-006
F4	Control power supply MCB	B872-22-062
F5	Overheat thermostat	B888-30-014
T1	Control circuit power supply	B801-93-005
K1	Top heat contactor	B801-08-021
K2	Bottom heat contactor	B801-08-021
Y1	Water solenoid (8 mm pipe)	A900-34-365
H1	Interior light	B855-94-008
B1	Oven thermocouple	B873-95-007
U1	Main ECO printed circuit board	158-25-80000
D1	Damper solenoid	B749-83-004
R1	Top heat element, 0.65 kW	B854-04-102
R2	Top heat element, 0.4 kW	B854-04-100
R3	Top heat element, 0.4 kW	B854-04-100
R4	Top heat element, 0.4 kW	B854-04-100
R5	Top heat element, 0.4 kW	B854-04-100
R6	Top heat element, 0.4 kW	B854-04-100
R7	Top heat element, 0.4 kW	B854-04-100
R8	Bottom heat element, 0.5 kW	B854-04-101
R9	Bottom heat element, 0.4 kW	B854-04-100
R10	Bottom heat element, 0.4 kW	B854-04-100
R11	Bottom heat element, 0.4 kW	B854-04-100
R12	Bottom heat element, 0.4 kW	B854-04-100
R13	Bottom heat element, 0.4 kW	B854-04-100
R14	Bottom heat element, 0.4 kW	B854-04-100

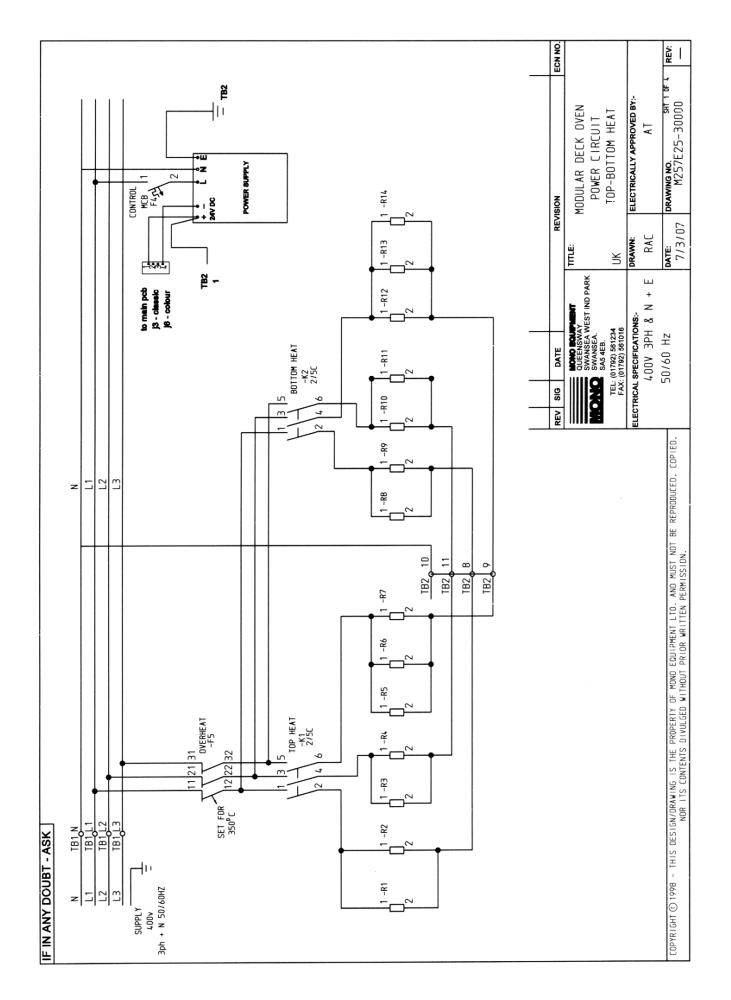
Table 9: Parts list for the electrical drawings (2-tray wide)

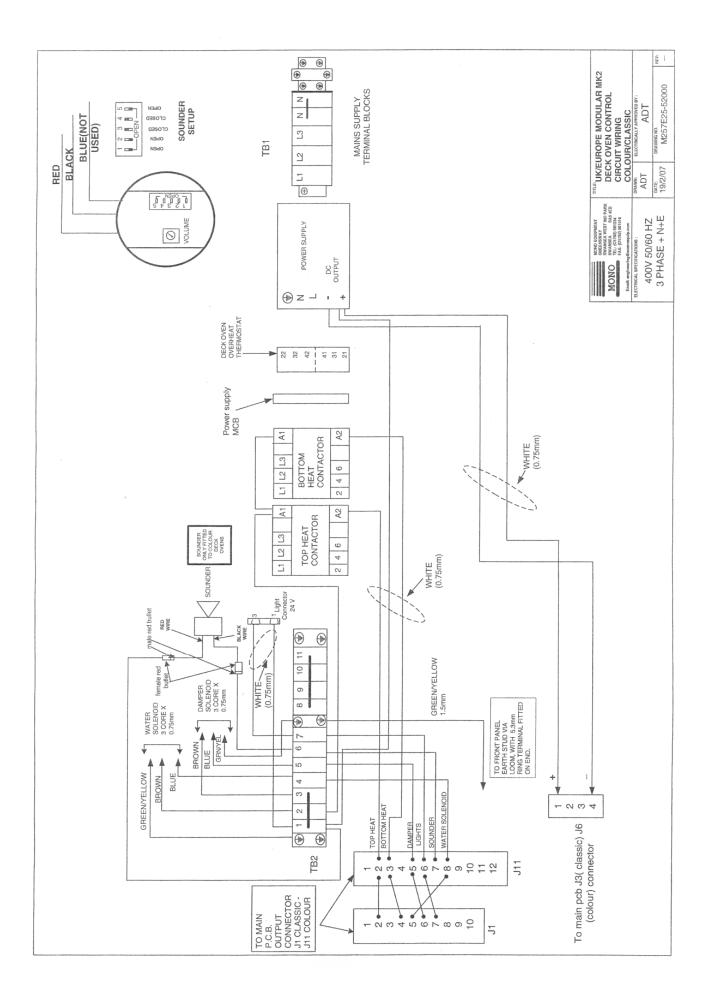


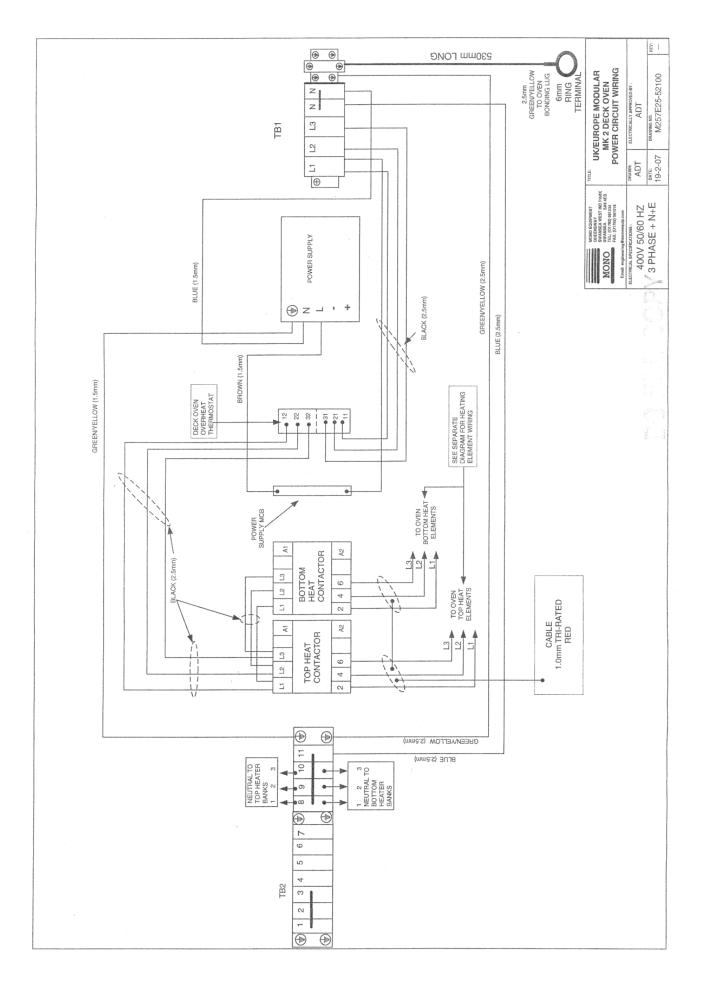
Electrical drawings

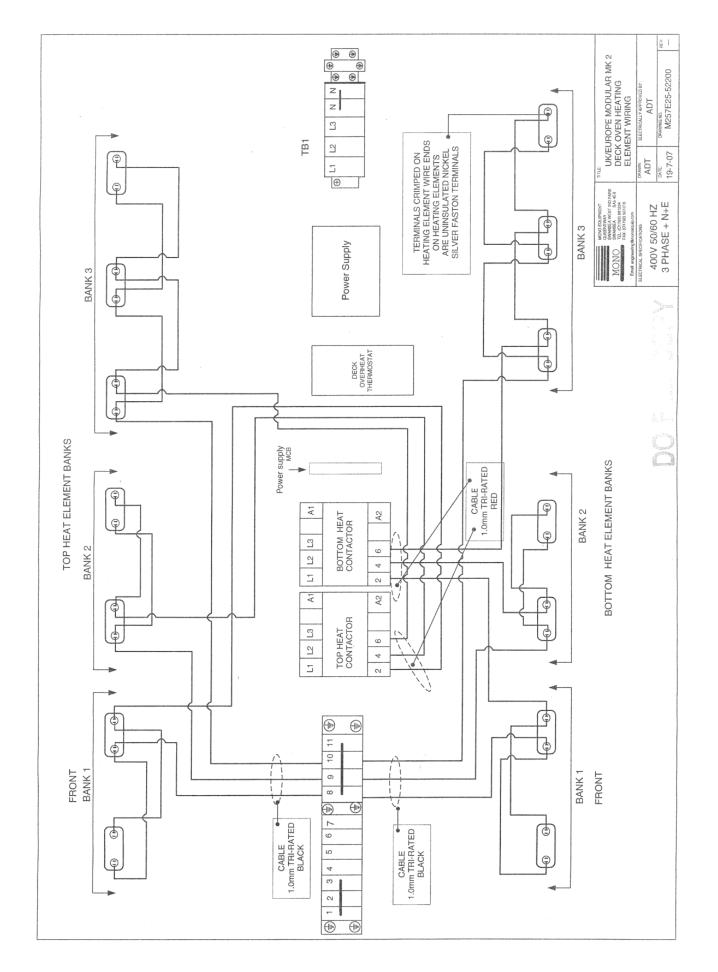
DX UK Modular MK2 Deck Oven Interlink Detail

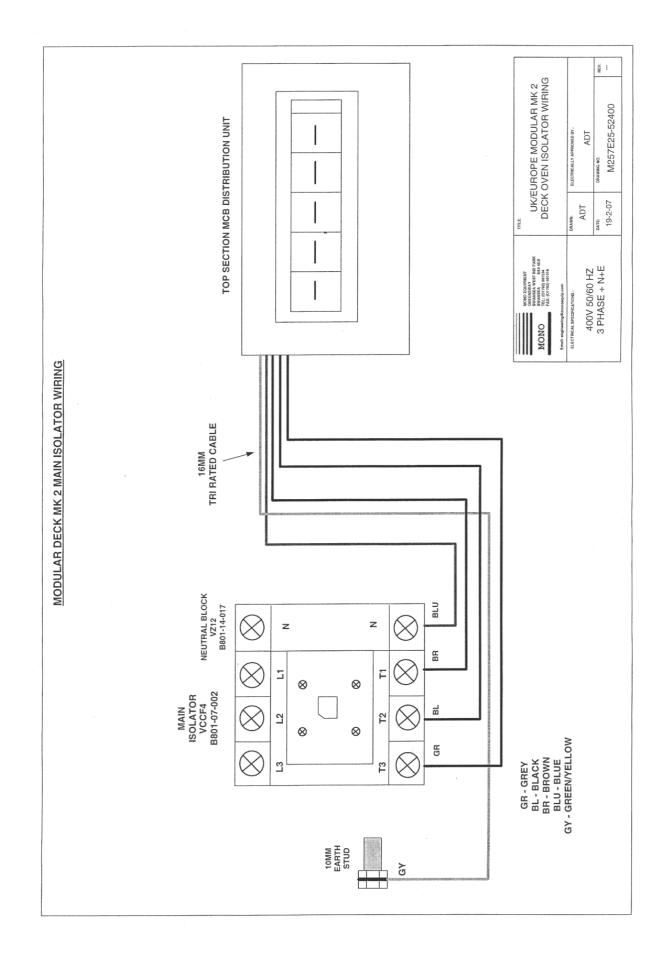




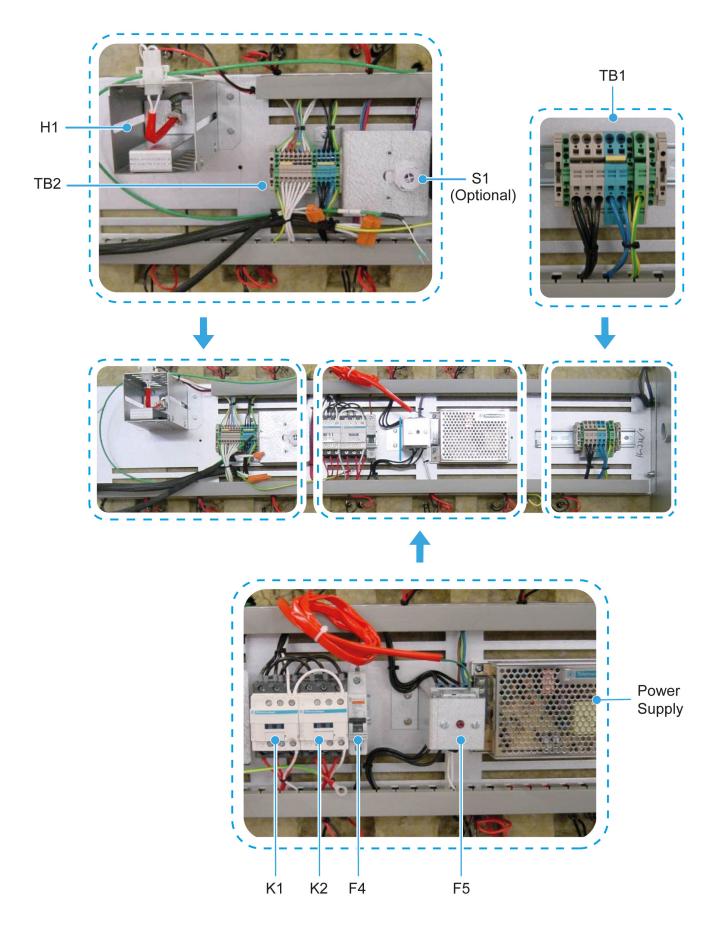








Electrical panel main components



Reference	Part description	Part number
C1	Canopy fan capacitor, 5 μF, 400VDB, metal	B869-23-005
Q1	Canopy fan on/off switch	B895-07-005
M1	Canopy fan motor R2E225-AG01-21 (230V, 1.4 Amp, 305 Watts)	B869-75-026

Table 10: Oven canopy layout parts list

18. Prover operating instructions

Note

It is the customer's responsibility to install and maintain an adequate water supply. Customers operating the prover in hard water areas must ensure that an efficient water treatment device protects the water supply to the prover. -- MONO is happy to advise on a suitable unit --

Prover controls

- **1.** Ensure the water (washing machine type hose) is connected at the rear and the power is connected to a suitable socket.
- Turn the power switch (A) to "dry" or "steam" ("Dry works like a hot cupboard and "steam" adds humidity (85%) and heat).
- **3.** Turn the temperature-setting button (**B**) to the required temperature; usually about 40 degrees. The heat indicator light (C) will come on.
- 4. When the light goes out it means the prover is ready for use. (Usually about 30 minutes, depending on the ambient temperature)

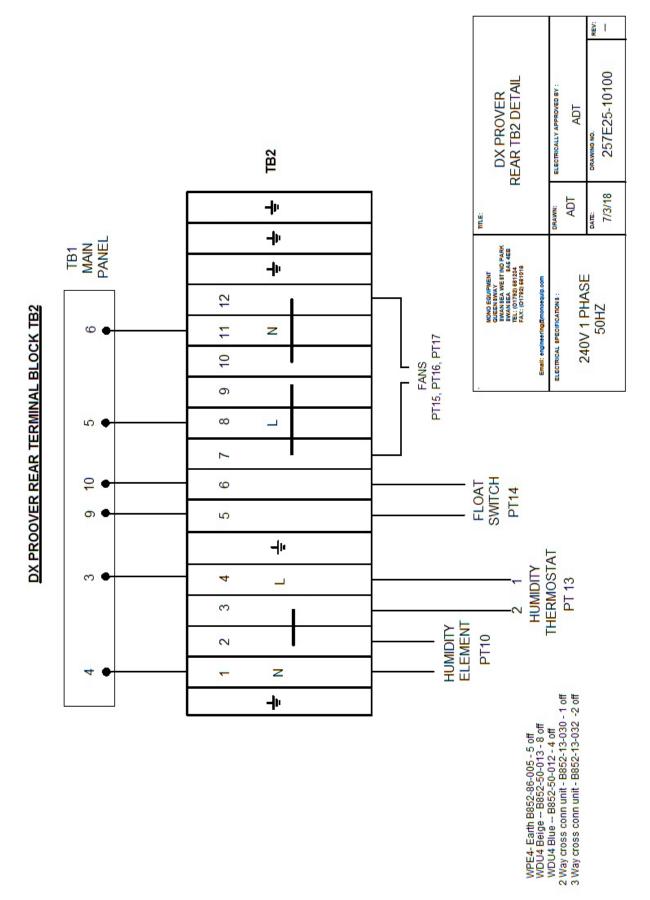
Note

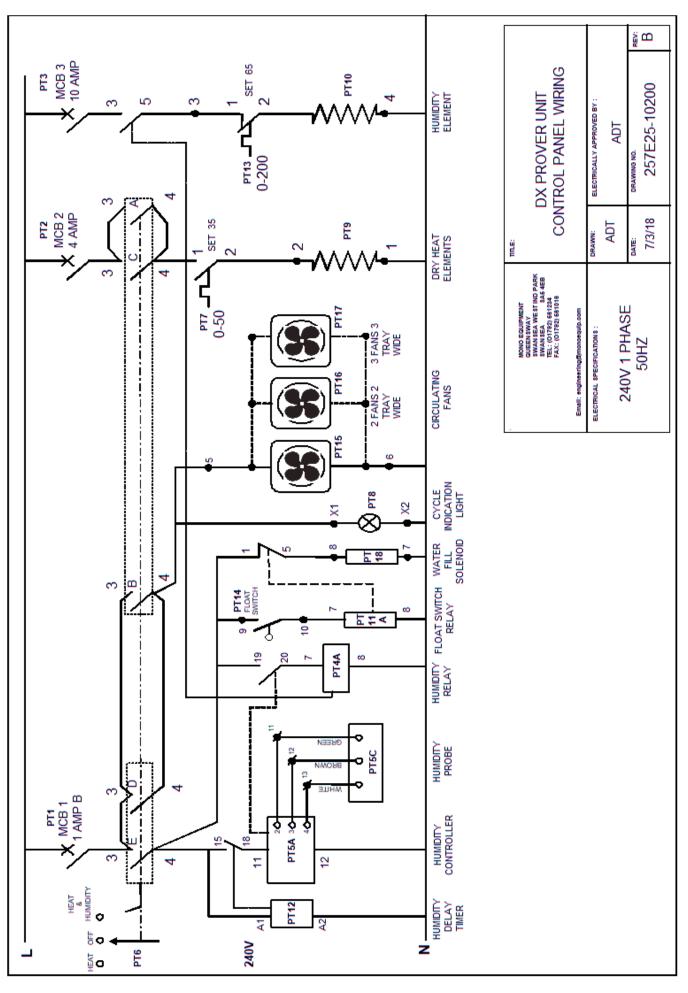
To maintain the humidity level within the cabinet, the doors should only be opened for a short time.

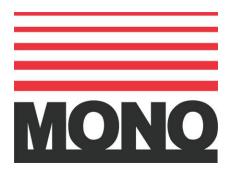


19. Prover electrics

Electrical drawings







MONO Equipment

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