



MonoEquip.com

MONO Harmony Deck Oven

EN

Quick Start Guide



Product Version

- UK specification
- Modular decks
- Classic controller

Enter Serial Numbers here

Deck 1
Deck 2
Deck 3
Deck 4
Deck 5
Fan (If fitted)

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

Manual Revisions

Revision	Publication Date	Author	Description
A25	28-Mar-2025	CD	Added JAN-2025 cable statement to the electrical sections.
			Updated UKCA Declaration of Conformity certificate.



Declaration of Conformity



We the manufacturer:

MONO EQUIPMENT

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

Machine:

FG Code:

Serial No:

Hereby declare that this machine conforms with and complies with the following directives:

- The Machine Directive **2006/42/EC**
- The Low Voltage Directive **2014/35/EC**
- The Electromagnetic Compatibility Directive 2014/30/EU Incorporating Standards **EN 55014-1:2017/A11:2022 & EN 55014-2:1997+A1:2001+A2:2008**
- The General Safety of Machinery and Food Processing Standards
- Materials and Articles Intended to Come into Contact with Food – Regulation **(EC) No. 1935/2004**
- Good Manufacturing Practices (GMP) for Materials Intended to Come into Contact with Food
- Regulation **(EC) No. 2023/2006**

A technical construction file for this machine is retained at MONO Equipment

MONO Equipment is a business name of **AFE Group Ltd** Registered in England No. 3872673

VAT Registration No. 923428136

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Mr Craig Petherbridge
Quality & Compliance Manager


Mr Alex Davies
Engineering Manager

QD 001

Dated 01/11/2022

Safety Symbols

The following safety symbols are used throughout this product manual. Before using your new equipment, read the instructions carefully and pay special attention to the information marked with the following symbols:

**DANGER**

Indicates an immediate hazard with a high risk of death or serious physical injury if not avoided.

**WARNING**

Indicates a potential hazard with a medium risk that could result in death or serious physical injury if not avoided.

**CAUTION**

Indicates a hazardous situation that could result in minor or moderate injury if not avoided.

Electrical Safety Notice



Electrical safety and advice regarding supplementary electrical protection

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

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

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

We recommend:

- Supplementary electrical protection with the use of a residual current device (RCD)
- Fixed wiring appliances should also 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 the following:

BS 7671:2018 – Guidance Note 8 – 8.13: Other locations of increased safety 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 washing and drying machines are nearby, 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 include:

- Automatic Disconnection of Supply (ADS) using 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 to comply with Regulations 419.2 and 544.2.



WARNING

- The supply to this machine must be protected by a 30mA-rated Type 'A' Residual Current Device (RCD).
- Before installation, it is recommended that a qualified and competent electrician first tests the electrical outlet for electrical safety.

Water Leak Safety Notice

**WARNING**

- **Take action immediately to get a water leak fixed and prevent death or serious injury from electrocution.**
-

It is essential to regularly check for any signs of a water leak from an oven installation. If there is evidence of a water leak, do not ignore it. Immediately report it to a manager or as applicable to your organisation.

Furthermore:

- Disconnect or completely isolate the oven from the electrical supply (see **Emergency Instructions** section on page 11).
- Place an out-of-service notice on the oven.
- Contact your oven supplier or MONO Equipment for technical assistance.

Ovens must be maintained and serviced at appropriate intervals to ensure the oven operates at optimum levels. See the **Maintenance** section on page 24.

General Notices

**CAUTION****■ Users with Implantable Cardioverter Defibrillators and Pacemakers**

- Several common types of devices and machinery may interfere with implantable cardioverter defibrillators (ICDs) and pacemakers, including mobile phones, headphones, radios, machinery, and magnets.
 - The electromagnetic waves generated by these devices can keep your ICD or pacemaker from functioning correctly. Try to avoid them, or at least minimise your exposure to them.
 - Your healthcare professional can advise you about specific devices and machinery to avoid.
-

**NOTICES****■ Warranty information**

- Ambient working temperatures for electrical components, such as solenoid switches, circuit breakers and motors, should not exceed 40 °C (115 °F). Manufacturers of these, and other electrical components, advise that any ambient temperature above this affects the functionality of the components. Any related guarantees become void.
- It is the owners' responsibility to ensure adequate ventilation is provided. Any component malfunctioning during the guarantee period found to have been subjected to excessive humidity or ambient working temperatures is not covered by the component manufacturer's or MONO Equipment's product warranty.
- Failure to adhere to the cleaning and maintenance instructions detailed in this User Manual also could affect the warranty of this machine.
- Visit the [MONO Parts and Labour Warranty page](#) for further information.

■ Continuous improvements

- Our policy is to improve our machines continuously, and we reserve the right to change specifications without prior notice.

■ Engineers/Electricians-only sections of the User Manual

- Technical sections of this User Manual are for suitably qualified and experienced persons only. Customers must never make any modifications or repairs to MONO's machines.
-

Contact Information

Thank you for purchasing this MONO Harmony Deck Oven.
“A combination of clean industrial design and the latest technology.”

The information in this quick start guide should get your purchase up and running without any problems.
If you have a problem with your purchase, please get in touch with us at:

MONO Equipment Limited

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

Tel. +44/0 1792 561234

Fax. +44/0 1792 561016

Email: mono@monoequip.com

Please quote the serial numbers of each deck when contacting us.
You can write the serial numbers here or in the boxes on the front page.

Safety

General safety messages



CAUTION

■ Magnets information:

- Magnetic fields in magnets, used in devices and machinery, can inhibit pulse generators for Implantable Cardioverter Defibrillators (ICDs) and pacemakers. Magnets can activate a switch prohibiting the ICD from delivering vital signals such as lifesaving shocks.
- If you have an ICD or pacemaker, avoiding close or prolonged contact with magnets or their magnetic fields is advisable. Keep magnets at least six inches from where your device is implanted. **If you feel any interference in any way, immediately move away from the source.**

Oven safety messages

Only fully trained and authorised persons are permitted to work on the oven. Qualified electricians must carry out all repairs and maintenance. Always disconnect or isolate the power supply before starting maintenance or cleaning work on the oven.

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



DANGER

- Never use the USB port to power or recharge electronic devices, e.g. mobile phones. Incorrect usage causes damage to the oven and could result in a fire.



WARNING

■ Before using the oven:

- Ensure all covers, panels, cables, and pipe fittings are secure.
- Visually examine the oven for apparent damage or signs of tampering.
- If the oven is damaged or malfunctioning, or missing parts:
 - Stop using it.
 - Do not attempt any repairs.
 - Contact MONO Equipment for technical assistance.
- Never operate the oven with any covers or panels removed.
- All utility connections to the oven must comply with the statutory requirements of the country where the oven is installed.
- Ensure this product manual is read thoroughly before operating the oven. Operate and maintain the oven only as described in this product manual.

**WARNING**

- An electrical socket must be protected by a 30mA-rated Type 'A' Residual Current Device (RCD) before installation and commissioning of the oven.
 - Always fit a wall-mountable isolator switch to isolate the oven entirely from the electrical supply in an emergency. The isolator must be visible, labelled as an emergency shutdown device, and easily accessible.
 - Check that the electrical requirements on the oven's information plate match the supply before connecting the power cable and turning the power on for the first time.
 - Before installation, it is recommended that a qualified and competent electrician first tests the electrical outlet for electrical safety.
 - Always ensure your hands are dry before touching any electrical components, including cables, switches, and plugs.
-

**CAUTION**

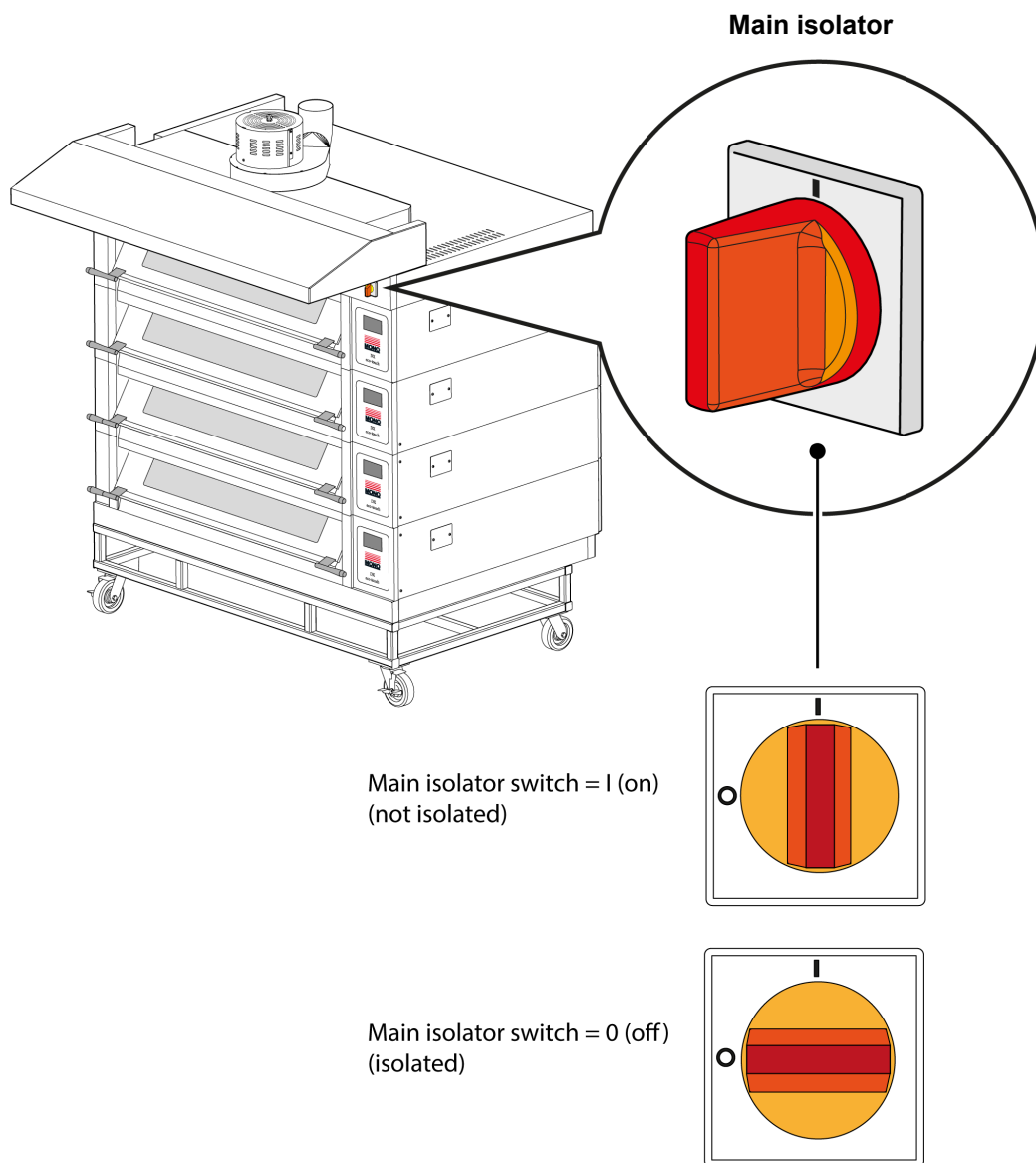
- Be aware of hot surfaces:
 - Do not touch the oven door with bare skin.
 - Always use oven gloves when loading or unloading the oven.
 - Allow time for the oven to cool down before cleaning it.
 - While the oven is in operation (and for some time after use), touching the oven door or the surrounding panels is inadvisable because of conducted heat.
 - When removing products from the oven, ensure the following:
 - Tins are knocked out and stored directly onto a tin storage trolley or rack. Do not leave hot tins on the floor or tables.
 - Trays are put into a rack and then wheeled to a safe cooling area.
 - Fully train operatives before they use the oven. Anyone undergoing training must be under the direct supervision of someone experienced.
 - Ensure there are no trip hazards around the oven, e.g. trailing cables.
 - Check that the floor around the oven is not slippery, e.g. no liquid spills.
 - Do not store items on top of or behind the oven.
 - Never climb onto the roof of the oven.
 - Only use the oven for baking bread, pastries, and cakes. Contact MONO Equipment for other product-baking machines.
 - No unauthorised modifications to the oven are permitted.
-

Emergency instructions

To stop the oven in an emergency, switch it off using the main isolator on the oven.

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

Figure 1: Main isolator switch on the oven



Installation

General

- A solid, smooth, level floor is recommended on which to position the oven, and access for maintenance should be considered.
- The oven is not a “built-in” design. Sufficient clearance must be left in front of the access panels (right-hand side) for servicing.
- If not chosen as an oven option, an extraction hood should be sited above the oven to disperse excess steam and heat, which could adversely affect the bakery ceiling and ambient temperature.
 - A chain retainer, shorter than the power cables, should be fitted to protect them from strain if the oven moves. Fit it to the wall or floor and the base, using the hole in the castor fixing corner plates.
 - Only trained engineers are authorised to install this oven. All water and electrical connections must comply with local and national regulations.

Electrical connections



WARNING

- An electrical socket must be protected by a 30mA-rated Type ‘A’ Residual Current Device (RCD) before installation and commissioning of the oven.
- Always fit a wall-mountable isolator switch to isolate the oven entirely from the electrical supply in an emergency. The isolator must be visible, labelled as an emergency shutdown device, and easily accessible.
- Check that the electrical requirements on the oven’s information plate match the supply before connecting the power cable and turning the power on for the first time.
- Before installation, it is recommended that a qualified and competent electrician first tests the electrical outlet for electrical safety.

Each modular deck requires its own power supply. Power cables are not supplied with the oven. The customer is to supply the power cables in accordance with the appropriate regulations.

The electrical loadings in [Table 1](#) and [Table 2](#) are for an individual deck module, not the complete oven.

Table 1: Electrical loading per standard-sized modular deck

Supply	4-tray wide	3-tray wide	2-tray wide	1-tray wide
400 Vac (50 Hz), 3-phase + neutral + earth	12 kW, 17 Amps	9 kW, 14 Amps	6 kW, 9 Amps	3 kW, 5 Amps

Table 2: Electrical loading per compact modular deck

Supply	2-tray wide
400 Vac (50 Hz), 3-phase + neutral + earth	4.8 kW, 7.5 Amps



NOTE

- Whenever connecting power to the oven, eight minutes must elapse before the oven’s steam function can be used. The bottom elements require enough time to heat up for steaming. This waiting time applies even if the power is disconnected and connected again, and the oven is still hot.

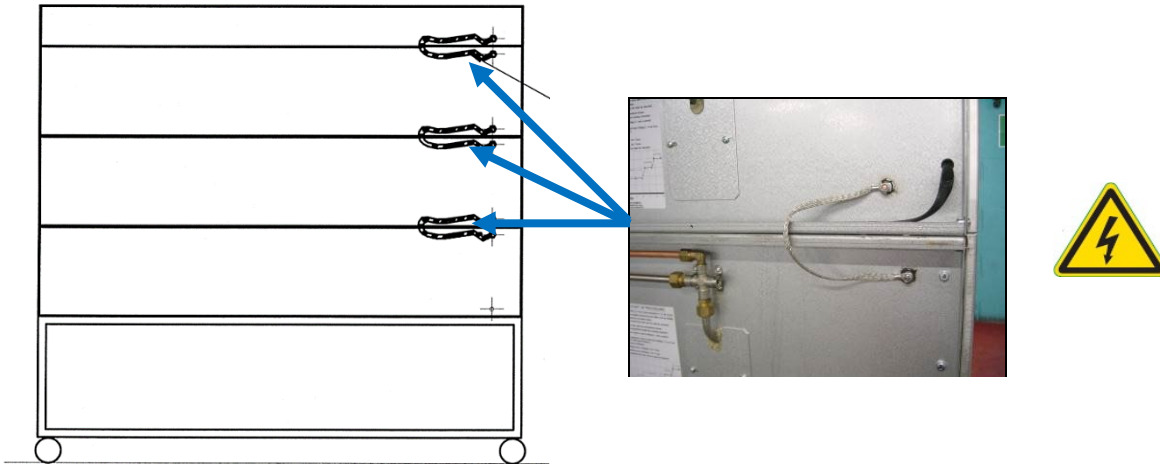
Fit earth straps (part no. 158-25-11200)



NOTE

■ Factory-built ovens already have them fitted, but always check that they are fitted.

Figure 2: Connect earth (ground) straps between each modular deck



Fit the tile retaining brackets (part no. 257-06-00015)



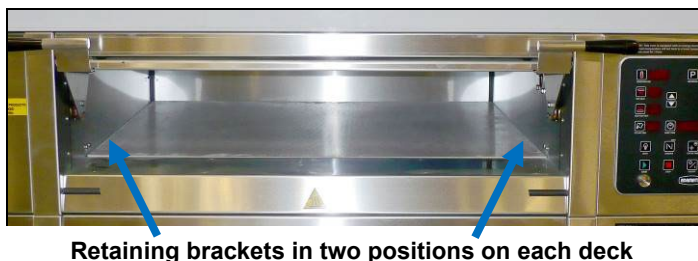
NOTE

■ Only deck ovens built on-site need this procedure, but always check that they are fitted.

Procedure

1. Find the brackets and screws loose in a supplied plastic bag.
2. Position the bracket to touch the tile (as shown in the photograph)
3. Fix the bracket using two screws.
4. Repeat steps 1 to 3 for both sides of each deck.

Figure 3: Installing the tile retaining brackets



Water supply requirements



NOTE ■ The setup procedure on the next page must be followed to allow the steaming system to function correctly.

- All ovens with steam require a ¾" BSP hot or cold water supply at a pressure of 2 to 3 bar (29 to 44 psi).
- Only one water supply is required per oven and must comply with local water regulations.
- All decks are supplied from one connection point on the rear of the oven.
- For proper operation of the steam system, it is recommended that the water supply has the following specifications:

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

Consult Mono for proper water filtration system information.

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

Water system setup procedure



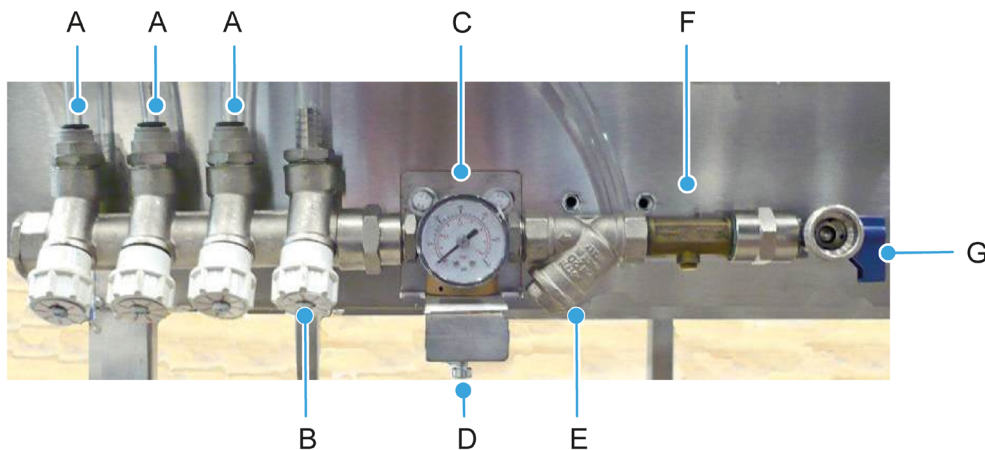
The water delivery to the deck oven must be checked for the steam system to operate correctly.

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 **(B)**.
5. Slowly open test valve **(B)** fully and, with the water flowing, set the regulator **(C)** to 0.75 bar using the screw underneath **(D)**.
 - Never use the oven above this setting.
6. When the pressure has stabilised, shut the test valve **(B)**.
7. Repeat steps 4 to 6 at the end of the installation.

Figure 4: Water regulator setup (located on the rear of the oven)



-
- A. To ovens
 - B. Test valve
 - C. Regulator
 - D. Adjusting screw to 0.75 bar
 - E. Filter
 - F. Dual check valve backflow prevention device
 - G. Stop tap
-

Before first use of the deck oven

Operating conditions

- Leave a clear space of at least 2 to 3 metres (6 to 10 ft.) in front of the oven for practical and safety reasons.
- Do not use bakery utensils to operate the control panel buttons.
- Ensure that the locking casters are locked into position.
- For hygiene reasons, MONO Equipment highly recommends thoroughly wiping the inside of the oven and all accessories with a clean cloth soaked in warm soapy water before using the oven for the first time. Although the utmost care is taken during assembly and pre-delivery inspection, there is always a possibility of residue contaminating the first bake if this is not done.

Baking tile ‘seasoning’ instructions

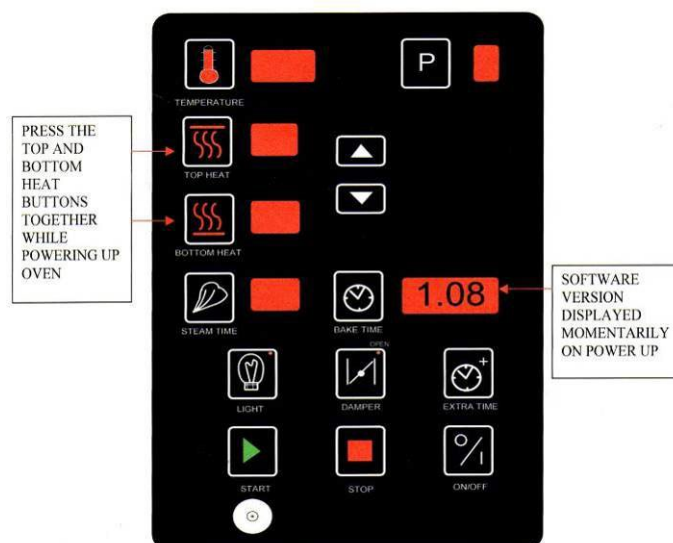
THIS PROCEDURE MUST BE FOLLOWED FOR THE OVEN’S WARRANTY TO REMAIN VALID.

For the oven to give good, reliable service, the deck tiles must initially be brought up to temperature as stated below; this ensures all residual moisture in the tiles has been removed.

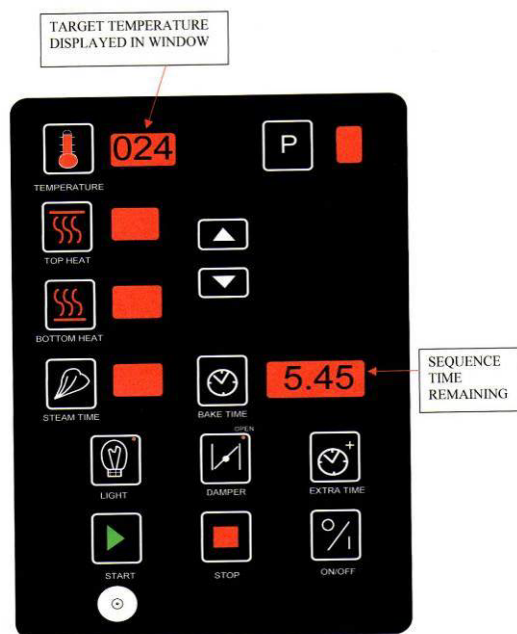
This procedure must be actioned **once** before the deck oven is used for the first time. After the tile seasoning procedure has been run, the oven can be used as required.

Tile seasoning procedure

1. Press and hold the top and bottom heat buttons while powering on the deck oven.
2. Release the heat buttons after the controller beeps and the software version is displayed in the Bake Time window.



3. The oven's controller now displays the **Target Temperature** and the **Remaining Process Time**.



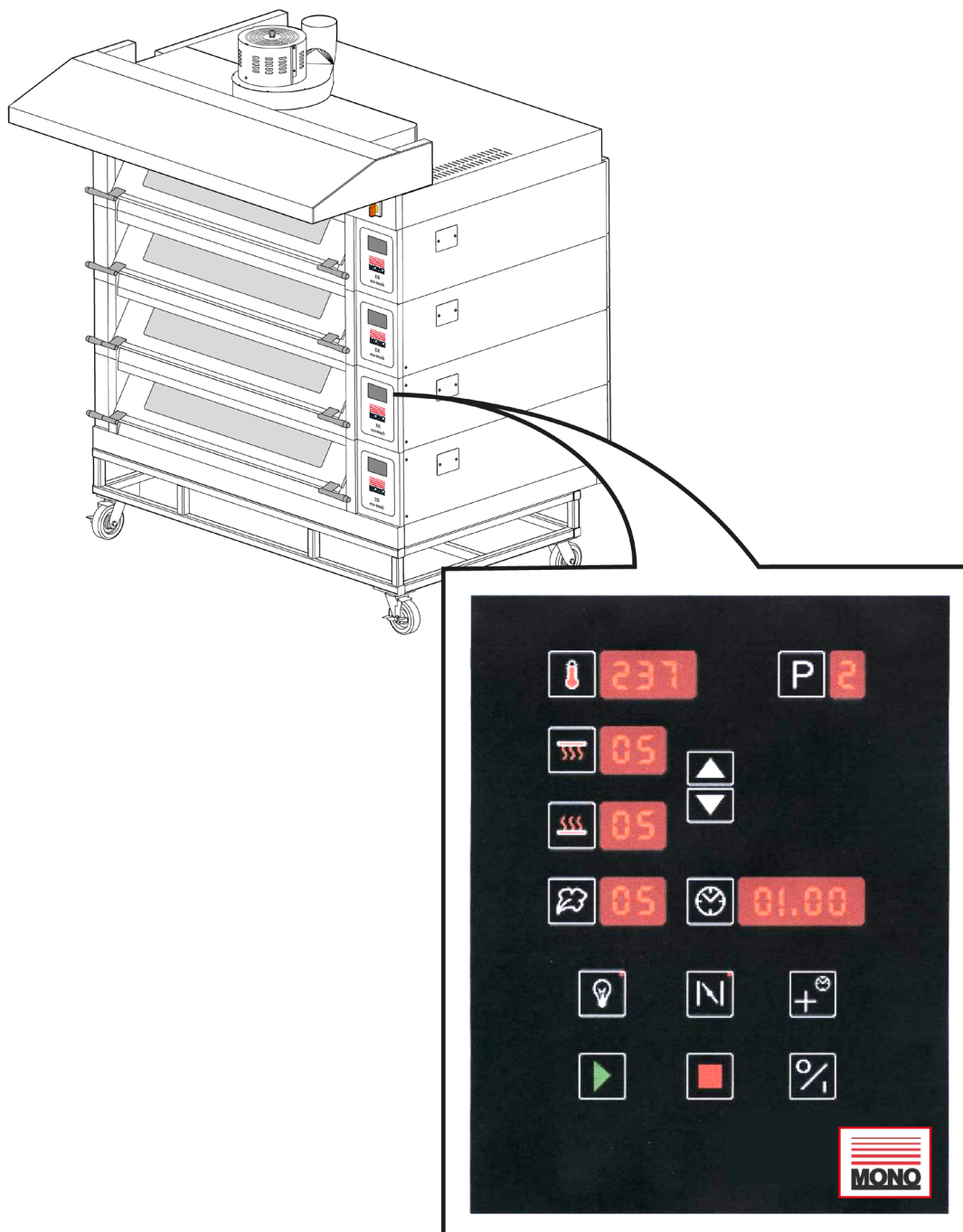
4. The Target Temperature increases by preset increments over 5 hours and 45 minutes. The Remaining Process Time counts down accordingly. During this process, the Damper opens every hour for 30 minutes to vent the moisture from the baking chamber.
5. At the end of the procedure, the oven switches into **Standby** mode and can be used for baking.

**NOTE**

- To stop the tile seasoning procedure, cycle the deck oven off and then on using the main isolator switch.
- The deck oven reverts to standby mode when power is restored.

Operating Instructions

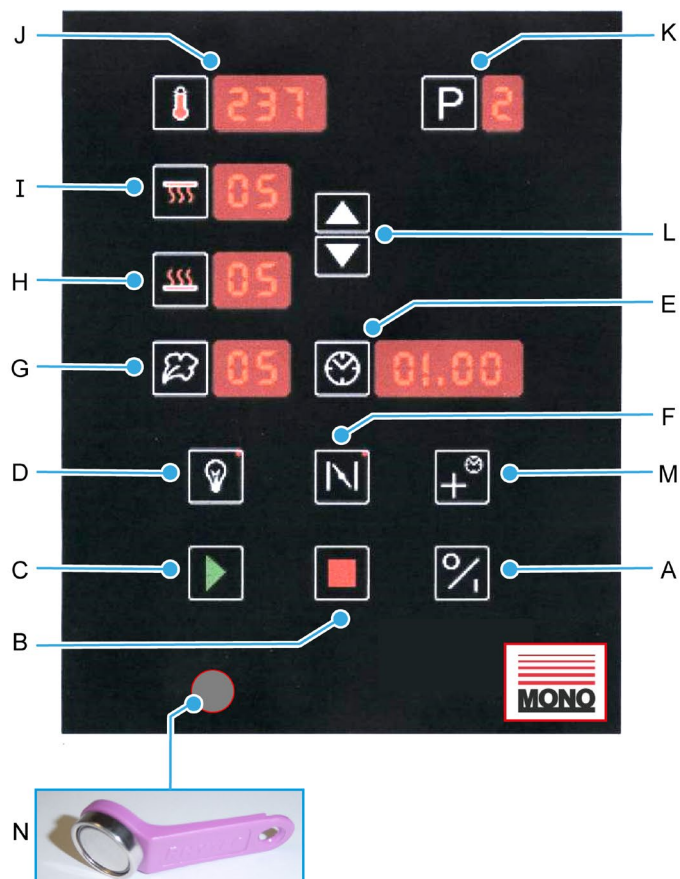
Each deck has an independent LED screen for operating the oven.



Basic operation

Perform operations by touching icons on the screen.

Figure 5: Classic LED screen icons



A. ON/OFF	B. STOP	C. START
D. LIGHT	E. AUTO-ON SET / ADD TIME	F. DAMPER
G. STEAM TIME	H. BOTTOM HEAT	I. TOP HEAT
J. TEMPERATURE	K. PROGRAM	L. UP/DOWN BUTTONS
M. BAKE TIME	N. iButton STORAGE DEVICE CONNECTION	

Operating the oven

1. With the oven in standby mode (power on), press the **ON** button (Figure 6 | A).

2. Press **P** (program) button (Figure 6 | K).

3. Using the **UP/DOWN** buttons (Figure 6 | L), choose the set program required.

The oven now heats to the temperature required. It is ready for use when the display shows the temperature of the program chosen and, if steam is needed, the display stops flashing.

4. Load the oven as required.

To preserve heat, do not leave doors open more than needed to load the oven.

5. Press the **START** button (Figure 6 | C).

Press the **BAKE TIME** button (Figure 6 | M) at any time during the baking to add 1 minute to the bake time.

If required during the bake, press the **DAMPER** button (Figure 6 | F) once to open the Damper, and press it again to close. A red light shows when the Damper is in the open position. If left open for 90 minutes, it closes automatically).

6. If enabled in the oven setup, a buzzer sounds for 10 seconds when the baking is 2 minutes from completion.

Press the **START** button to silence the buzzer.

7. At the end of the bake, the buzzer will sound.

Press the **STOP** button (Figure 6 | B) to silence the buzzer.

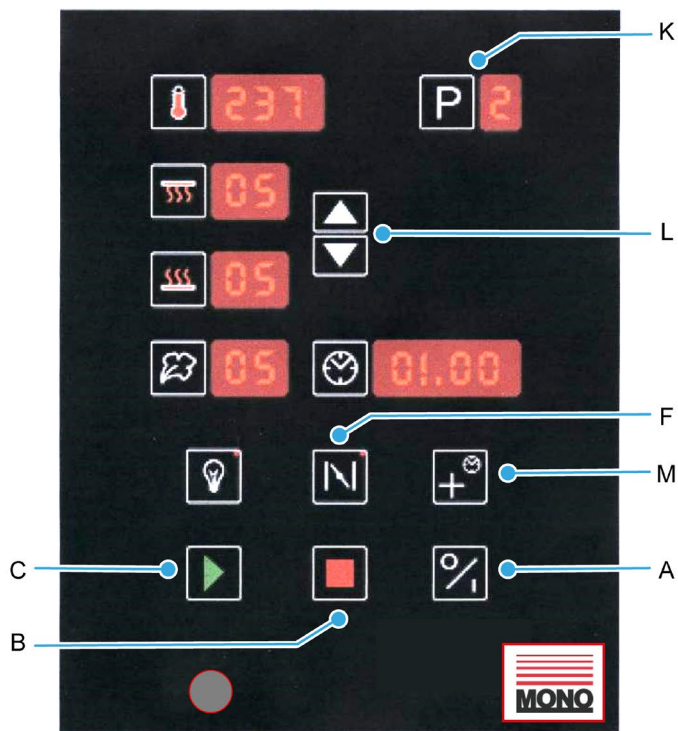
8. If requiring extra baking at the end of a bake:

(a) Press the **BAKE TIME** button to set 2 minutes and 1 minute for each additional press.

(b) After selecting the extra time, press the **START** button or wait 5 seconds for the bake countdown will start automatically.

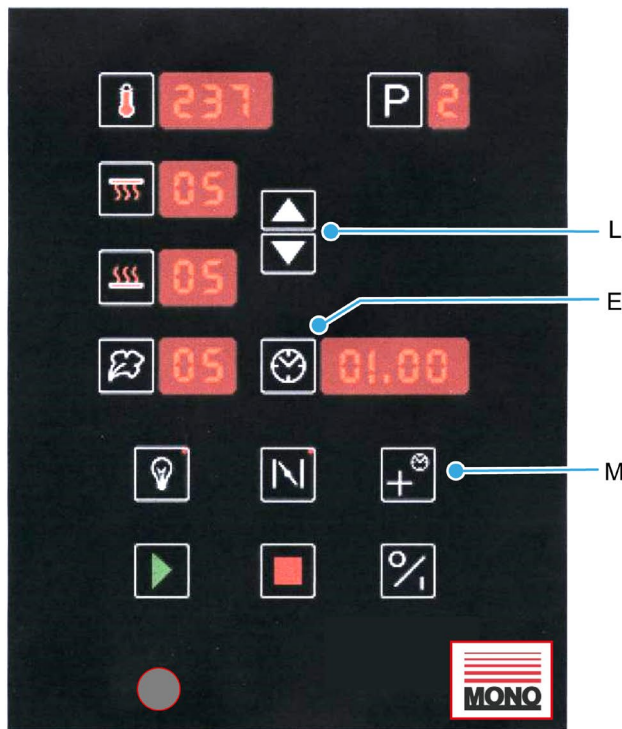
**NOTE**

■ Steam is not available when using this extra time baking.

Figure 6: Operating the oven – Classic LED screen icons

Setting the day and time

1. Turn the power supply on.
This will put the oven in “standby mode” with only the clock showing.
2. Press the **CLOCK** button (**Figure 7 | E**) and dots will flash under the hours in the time window.
Change the hours using the **UP/DOWN** buttons (**Figure 7 | L**).
3. Press the **CLOCK** button again and dots will flash under the minutes in the time window.
Change the minutes using the **UP/DOWN** buttons (**Figure 7 | L**).
4. Press the **CLOCK** button again and the day number will show.
Change the minutes using the **UP/DOWN** buttons (**Figure 7 | L**). Usually, day 1 is used as Monday.
5. Press the **CLOCK** button within 5 seconds to save the settings.

Figure 7: Setting the day and time – Classic LED screen icons

Setting the 7-day timer



NOTE ■ Enable F15 in the setup for the 7-day timer to function.

Procedure for setting a timer event

1. Press the **I/O** button to put the controller into standby mode.
Only the current time is displayed in the bake time window.
2. Press the **BAKE TIME** button (Figure 8 | M).
The day of the week appears in the P window (and dots appear next to the day).
Press the **UP/DOWN** button (Figure 8 | L) to change the day number.
3. Press the **CLOCK** button (Figure 8 | E), and dots appear under the hours in the time window.
Change the hours using the **UP/DOWN** buttons (Figure 8 | L).
4. Press the **CLOCK** button (Figure 8 | E) again, and dots appear under the minutes in the time window.
Change the minutes using the **UP/DOWN** buttons (Figure 8 | L).
5. Press the **BAKE TIME** button (Figure 8 | M) to save and exit the timer setup.

Cleaning

Daily cleaning instructions



Isolate the oven from the electrical supply before cleaning.



Take care that water does not enter the control-panel mounting or roof-mounting fan.
Never use a pressure washer or water hose to clean the oven.

Procedure

1. Sweep any debris out of the oven **after** it has been allowed to cool.
NOTE: Use a vacuum cleaner with metal attachments (i.e. able to take the heat), if available.
2. Brush down and wipe the oven front, back and sides with a damp cloth.
3. Spot clean outside with a damp cloth, soaked in a solution of mild detergent and hot water.
Ensure excess water is not applied around the electrical panels.

Weekly cleaning instructions



Isolate the oven from the electrical supply before cleaning.



Take care that water does not enter the control-panel mounting or roof-mounting fan.
Never use a pressure washer or water hose to clean the oven.



Do not stand on the roof.

Procedure

1. Complete the daily cleaning procedure as above.
2. Use a nylon brush to scrub the wheels with 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.

Maintenance

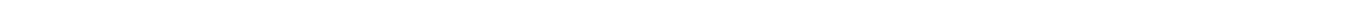
General maintenance

**WARNING**

- This appliance must be maintained at regular intervals. The frequency of maintenance will depend upon your specific use and location. The maximum service interval should be 12 months.
 - Service and maintenance should only be undertaken by suitably qualified, trained, and competent engineers.
 - You must immediately report any damage or defect arising with the appliance.
 - Unsafe equipment is dangerous. Do not use the appliance. Isolate the power supply and contact MONO or your appointed service agent.
-

- Check for frayed or bare cables.
 - **Do not** use the machine if frayed or bare cables are visible.
- Follow cleaning instructions (see **Cleaning** on page 23).

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MONO Equipment is the leading designer and manufacturer of bakery equipment in the United Kingdom. This proud heritage of British craftsmanship, combined with a reputation for creating high-quality, innovative products, can be traced back to its origins in 1947.

All our bakery equipment is manufactured to the most stringent NQA ISO9001:2015 & NQA ISO14001:2015 standards and is crafted using the very latest, cutting-edge technology combined with the time-honoured skills of the master craftsman.

MONO Equipment truly excels in providing tailor-made solutions to a diverse range of clients, from the small independent artisan baker to the large retail chains found on every high street and in every out-of-town shopping centre. We can supply everything from a simple Food-2-Go cafe oven to the entire list of bakery equipment needed to set up a full scratch bakery.



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