Enter Serial No. here._____

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





BX OVEN SET UP AND OPERATION OF OVEN WITH ECO CONTROLLER

Failure to adhere to the operation, cleaning and maintenance instructions detailed in this manual could affect the warranty of this oven.



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 2006 / 95 / 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	etta Mauro	
I	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 35, Bryggen Road, North Lynn Industrial Estate, Kings Lynn Norfolk, PE30 2HZ

SAFETY SYMBOLS

The following safety symbols are used throughout this product documentation and manual (available at www.monoequip.com).

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 which, if not avoided, will result in death or serious injury.



WARNING

Indicates a hazardous situation which, if not avoided, will result in electric shock.



CAUTION

Indicates a hazardous situation which, if not avoided, will result in minor or moderate injury.

ELECTRICAL SAFETY AND ADVICE REGARDING SUPPLEMENTARY ELECTRICAL PROTECTION:

Commercial bakeries, kitchens and foodservice 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.



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



IF OVEN FAILS TO HEAT UP, WHEN FIRST CONNECTED TO A POWER SUPPLY OR DURING USE AT ANYTIME, PRESS RESET BUTTON(S) LOCATED THROUGH THE REAR BACK PANEL. (DO NOT REMOVE BACK PANEL)



REAR VIEW OF OVEN

IF THIS FAILS TO CORRECT THE SITUATION, PLEASE CONTACT YOUR SUPPLIER

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1.0 INTRODUCTION

- A combination of clean industrial design and the latest technology, the **MONO BX oven range** is designed specifically to take the baking Industry's standard trays.
- The ovens in the range are of stainless steel construction
- The smaller ovens are designed to be **stackable** without separate support.
- The high-speed fans and elements give **efficient air circulation** to produce a professional bake across a range of products.
- The doors are **double glazed** to increase the efficiency of the ovens well-insulated baking chamber and also house the energy efficient led lights.
- Ovens are supplied with LCD TOUCH displays for the user-friendly control panels.



2.0 SPECIFICATIONS

PLEASE CHECK RATING PLATE ON THE OVEN FOR APPLICABLE VERSION

		7 TRAY OVENS	
DIMENSION	<u>8</u>		
		40.00	
IRAY SIZE		40x60	
HEIGHT		655mm	
WIDTH		780mm	
DEPTH – DO	OR CLOSED	1109mm	
POWER	(3 phase or single phase a	available)	
4	The supply to this machine	must be protected by a 30mA RCI	D
3 phase	415v. 3 PHASE + N 10kW ,14am	+ E, 50HZ nps per phase.	
Single phase	240v. 50HZ 10kW 4	5Amps	
Noise Level:	Less than 85d	B.	

<u>NOTE</u>

No drainage is required for this oven.



3.0 <u>SAFETY</u>

In the interest of safety and efficient operation of the oven, it is essential that this manual should be made available to the operator before work is commenced. The following points should be observed and followed at all times.

1. The oven is designed for baking of bread, confectionery and savoury products only. DO NOT use it for any other items without consulting with **MONO**.



- The oven must be allowed to cool before any form of cleaning is started.
- All repairs and maintenance of electrical units must be carried out by authorised electricians; even then, electrical access panels must not be opened unless the mains supply to the oven is isolated.
- 4. All connections to the oven must be made in accordance with the statuary requirements of the country of installation.
- 5. 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.
- 6. The oven must be operated as described in this manual.
- 7. Only **MONO** spare parts should be used on this oven.
- 8. The construction of the oven must not be changed.
- The owner of the oven is legally obliged to instruct staff of these safety points and of the safe operation of the oven.
 These instructions should not be removed from the working area.
- 10. To prevent door glass from shattering -DO NOT CLEAN OVEN GLASS WHEN HOT.
- 11. Oven gloves should be worn when moving products in or out of the oven.



Do not block the flue outlet pipe on top of the oven. (see photos below) **ATTENTION**





DO NOT COVER THE DAMPER FLUE



- 2. It is the customers' sole responsibility to arrange adequate ventilation and it should be sufficient to ensure water does not condense on or around the oven. A 50mm gap is required at the sides and rear of this oven and 150mm above. Chimneys and evacuation ducts, fitted above mono ovens should be insulated.
- 3. In the interests of hygiene, we strongly recommend that before using the oven for the first time you wipe the inside of the oven and all accessories thoroughly with a clean cloth soaked in warm soapy water. 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.

4. Ensure that the locking castors on the base unit (if supplied) are locked into position.

5. **AMBIENT WORKING TEMPERATURES**.

Ambient working temperatures for electric/electronic components such as solenoid switches, circuit breakers, motors etc should be <u>no more than 40°C (115° f)</u>

Manufacturers of these and other electrical components advise that any ambient temperature above 40 °C affects the functionality of the components and any related guarantees become void. For example, above this temperature motors are not satisfactorily cooled, contactor efficiency is seriously impaired and electronic components shut down. It is the customers' sole responsibility to arrange for adequate ventilation. Any component malfunctioning during the guarantee period that is found to have been subject to excessive humidity or ambient working temperature above $40 \,^{\circ}C$ ($115 \,^{\circ}F$) will not be covered by the component manufacturers guarantee or MONO's product warranty.

5.0 ISOLATION

ELECTRICITY SUPPLY

To stop the oven in an emergency,

switch off electricity at the wall isolator.

WATER

For stacked ovens, the water supply can be shut off by closing the shut-off valves (See diagram)

For non-stacked ovens the water supply should be shut off at the nearest shut-off point



6.0 CLEANING INSTRUCTIONS

DAILY CLEANING



- The equipment is to be cleaned daily using approved chloride-free cleaning fluid
- Sweep any debris (after it has been allowed to cool) onto oven removable trays and remove for cleaning.
- Brush down and wipe oven front, back and sides.
- Wipe clean with a damp cloth that has been soaked in a solution of mild detergent and hot water.

<u>NOTE</u>

The inner door glass is hinged to enable cleaning of internal surfaces.

To open, remove the two screws shown in the picture below.

The internal surfaces of the door glass can then be cleaned using a suitable glass cleaner.



Ensure both screws are replaced after the glass has been cleaned.



WEEKLY CLEANING (OR SOONER IF REQUIRED)

NOTE: BEFORE CLEANING, ISOLATE OVEN FROM MAINS SUPPLY AND ALLOW TO COOL.

Complete daily check on the previous page then

- Clean any burnt-on debris by careful use of a proprietary oven cleaner, carefully following the manufacturer's instructions. Do not allow the oven cleaner to get onto the control panel.
- Scrub cabinet wheels (if fitted), with a mild detergent and hot water using nylon cleaning brush.

7.0 IDEAL OPERATING CONDITIONS

- Room should be allowed for the door to open fully to allow easy loading and unloading of product without people coming in contact with hot surfaces.
- To ensure that operators do not slip. The floor area around the oven should be kept clean and free from spilt fat etc
- Racks should be available to allow cooked products to cool safely.
- Oven gloves should be available at all times.
- It is the customers' sole responsibility to arrange adequate ventilation and it should be sufficient to ensure water does not condense on or around the oven. A 50mm gap is required at the sides and rear of this oven and at least 150mm on top.
- Chimneys and evacuation ducts, fitted above mono ovens should be insulated

AMBIENT WORKING TEMPERATURES.

Ambient working temperatures for electric/electronic components such as solenoid switches, circuit breakers, motors etc should be <u>no more than 40°C (115° f)</u>

Manufacturers of these and other electrical components advise that any ambient temperature above 40°C affects the functionality of the components and any related guarantees become void. For example, above this temperature motors are not satisfactorily cooled, contactor efficiency is seriously impaired and electronic components shut down. It is the customers' sole responsibility to arrange for adequate ventilation. Any component malfunctioning during the guarantee period that is found to have been subject to excessive humidity or ambient working temperature above 40°C (115°F) will not be covered by the component manufacturers guarantee or MONO's product warranty.



Section 8

TOUCH SCREEN OPERATING INSTRUCTIONS

7 tray STEAM, LED LIGHTS RevA20 22-01-20

BASIC OPERATION

ALL OPERATIONS ARE ACTIVATED BY TOUCHING AREAS ON THE SCREEN, WHICH WILL PASS YOU ON TO THE NEXT INFORMATION PANEL.

DO NOT USE EXCESSIVE FORCE. (THE PRESSURE REQUIRED TO OPERATE THE PANEL CAN BE ALTERED IN THE SETTINGS SECTION)



8-1.0 BAKING USING FAVOURITES MENU





SET TEMPERATURE

TEMPERATURE PROFILE BAR

BAKE TIME PROGRESS BAR

<u>NOTE</u>

The actual temperature shown will rise and fall above and below the set temperature as the oven cools and reheats. This is not a fault







TOUCHING **"VIEW"** BUTTON DURING A BAKE WILL SHOW THE SETTINGS FOR THE BAKE IN PROGRESS. TOUCH **"CANCEL"** TO GO BACK TO THE PREVIOUS SCREEN.



8 - 2.0 BAKING USING MANUAL MENU



SET BAKE TIME AND TEMPERATURE



NOTE:

TIME DOES NOT HAVE TO BE SET IN MANUAL MODE. (ONLY TEMPERATURE) WHEN START IS TOUCHED, THE TIME WILL COUNT UP INSTEAD OF DOWN. TOUCH STOP TO FINISH BAKE.

USE STEAM TIME AND DAMPER IF REQUIRED



SAVE MANUAL PROGRAM, IF REQUIRED



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

8 - 3.0 BAKING USING PROGRAMMES MENU

<u>NOTE</u> : THIS COVERS TWO VERSIONS OF FIRMWARE. THE OVEN CAN BE SET TO SHOW EITHER 1. PICTORIAL CHOICES OF PRODUCT CATERGORIES 2. A NUMERICAL VERSION THAT SHOWS RANGES OF PROGRAM NUMBERS.





7 tray STEAM, LED LIGHTS RevA20 22-01-20



TOUCHING "VIEW" BUTTON DURING BAKE



8 - 4.0 BAKING USING MULTI-BAKE MENU

Multi-bake allows the setting of up to four bake timers so that up to four different products can be baked in the same load. (Products must all use the same temperature).



Touch temperature and set by using up and down keys (or press the number pad symbol and a keypad appears). Enter the value required and touch done.	2
Set each timer as required. (You do not have to set all four)	
Touch minutes and set by using up and down keys (or touch the number pad symbol and a keypad appears). Enter the value required and touch done.	
Touch seconds and set by using up and down keys (or press the number pad symbol and a keypad appears). Enter the value required and touch done.	



TOUCH THE START BUTTON WHEN REQUIRED AND THE TIMER WILL COUNT DOWN. 3



MULTI-BAKE SETUP SCREEN WITH FOUR TIMERS RUNNING

AT THE END OF A SET TIME A	Λ
BUZZER SOUNDS.	4
TOUCH RED BAR TO STOP	
	AT THE END OF A SET TIME A BUZZER SOUNDS. TOUCH RED BAR TO STOP

8-5.0 CREATING A PROGRAM





















8 - 6.0 SETTING 7–DAY TIMER



<u>NOTE</u>

Up to four on/off times can be set for each day. Touch "clear" to clear the settings on the day shown. Touch "save" to activate the times set.

8 - 7.0 SETTINGS





OVEN SETTINGS (GENERAL)



TOUCH "GENERAL SETTINGS" AND THE FOLLOWING SCREEN WILL APPEAR.

SCROLL DOWN TO MOVE THROUGH ALL CHOICES AND ADJUST EACH ONE AS REQUIRED, USING THE ARROW KEYS.



OVEN SETTINGS EXPLAINED - GENERAL LEVEL

SCREEN BRIGHTNESS -

Adjusts the brightness of the viewing screen for user comfort.

TOUCHSCREEN SENSITIVITY -

Adjusts the pressure required to operate the touch screen. (5 settings)

TEMPERATURE UNIT OF MEASURE –

Centigrade (Celsius) or Fahrenheit

BAKE EXTENSION (mins) -

Adjusts the extra time at the end of a bake for each "extra time" button press. (10mins max)

BAKE START ON DOOR CLOSE -

This will start the set bake program as soon as the door closes.

SLEEP MODE DELAY –

Oven will go into sleep mode after the set minutes, providing it is up to temperature and has been through at least one bake cycle.

8 HOUR COUNTDOWN TIMER -

After 8 hours the oven gives a warning and then turns off. Press any button for an extra hour if required.

POWER LEVEL (1-4) -

Set these as required for each level to be used.

CHART INTERVAL -

Time interval in seconds that the bars show on the heat and bake time progress charts.

SOUNDER SELECT -

Set as external or onboard.

SOUNDER TONE -

Select a tone – Voice or Off

SOUNDER VOLUME -

Adjust to suit the volume required. (onboard sounder only)

SHORTCUT BUTTONS -

1 fn 2fn	Gives the choice of what buttons are active and in which order they appear on the options screen.
3fn 4fn 5fn	Options available = Favourites, Programs, Manual bake, Multi bake, 7-day timer . (Settings at 6fn can not be changed)



OVEN SETTINGS EXPLAINED - HIGH LEVEL

OVEN TYPE -

Set this to the type of oven that the screen is installed on.

MAX. BAKE TEMPERATURE -

Can be set up to 300C, (depending on the oven type)

TEMPERATURE OFFSET -

Can be used to adjust the display to the actual temperature in the oven.

BAKE HYSTERISIS –

Sets bake temperature cycling around a set point. (Above and below).

SLEEP FALLBACK -

Temperature of the oven in "sleep mode" (100C is suggested).

SLEEP HYSTERISIS -

Sets "sleep mode" temperature cycling around a set point. (Above and below).

READY ACCEPT HIGH -

Highest temperature for the oven to display "READY"

READY ACCEPT LOW –

Lowest temperature for the oven to display "READY"

FAN DELAY AFTER STEAM -

Delay before fan starts after the oven has steamed. (60 seconds max)

LIGHT OUTPUT SOFT START -

On/Off Some lights need this for cold start up to stop them blowing.

AUTO FAN CYCLE TIME (MINS) -

Set time required. Only used in manual and multibake modes.

AUTO FAN DWELL TIME -

Set time required. Only used in manual and multibake modes.

HEATER CONTROL –

Contactor or solid state. Defaults to contactor. (solid state not used at the moment)

I/O DIAGNOSTIC -

Displays outputs and inputs at the top of the screen to aid fault finding if needed.

DEFAULT PASSCODES

SUPERVISOR (LOW LEVEL) -- 123456

HIGH LEVEL -- 654321

MASTER -- 314159 (This is fixed)

SUGGESTION

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

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

8 - 8.0 USING THE USB PORT



Ensure the Start screen is showing

1

START SCREEN



Insert the USB memory stick into the socket on the side of the oven panel. (Rubber plug may have to be removed first).

<u>NOTE</u> The USB stick will only fit in one way. <u>Do not force into the socket.</u>



Wait for the USB	symbol to	finish	moving
------------------	-----------	--------	--------

~	
· .	
_	





Touch item to select	
Load Products	Load Start Screens
Save Products	Load Skin
Save Log	Load Sounds
× Cancel	

Choose action you would like to do.

IVI.	ALEV				

USB Drive	
File 'MALEVOX' loaded ok	
Load Products	Load Start Screens
Save Products	Load Skin
Save Log	Load Sounds
× Cancel	

When confirmation of "file loaded ok" shows, remove usb stick

Select	the file	required.	
001001		roquirou.	

6

5

NOTES ON USING USB STICKS

For a USB stick to function correctly it must have the following folder in the root folder .

Mono

Then into that folder add the following:

Firmware Products Skins Sounds Startup

Place your recipe/product files in the "products" folder.

The oven will find the "**Mono**" folder automatically when the stick is plugged into the oven. Any stick can be used (does not have to be blank) but the Mono folder must be in the root folder.

The most used folders are explained below:

<u>SKINS</u>

These control the way the screen looks in different modes.

Pictorial is when the screen displays catergories using pictures.



Numerical is when the screen displays program numbers.



STARTUP SCREENS

This is the picture/logo you see when the oven is started.



PRODUCT FILES (PROGRAM FILES)

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

8 - 9.0 DIAGNOSTICS



Diagnostics 5 Ambient Thermocouple 29°C 201°C				
Inputs	Door Open	Fan O/L	Over temp	
Output	Heater	Fan Fwd	Fan Rev	Damper
Output	Steam	Lights	Alarm	Сапору
X Cancel				

DIAGNOSTICS SCREEN



9.0

MAINTENANCE



- Check for frayed or bare cables.
 The machine must not be used if frayed or bare cables are visible.
- Follow cleaning instructions.

10.0 STEAM SYSTEM MAINTENANCE

• If it is noticed that the steaming operation has deteriorated, perhaps due to hard water scaling, please contact your oven supplier

11.0 INTERIOR LIGHT REPLACEMENT

In the event of a light failure, please contact your supplier. There are no customer replaceable parts.







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

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Tel. 01792 561234 Spares 44+(0)1792 564039 Fax. 01792 561016

• OVEN 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 BY RECYCLING OR OTHER MEANS OF DISPOSAL THAT COMPLIES WITH LOCAL REGULATIONS.

(IN UK, ENVIRONMENTAL PROTECTION ACT 1990 APPLIES)