OPERATIONAL & TECHNICAL MANUAL

Multigen XS-S-M-L

Technical and Operational Manual



TECHNICAL & OPERATIONAL MANUAL

ORIGINAL INSTRUCTIONS

Multigen Series



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2. General Safety Information

This "User Manual" complies with the relevant EU guidelines and forms an integral part of the Multigen XS, S, M and L, which are hostess bulk food service delivery trolleys.

All installation and maintenance work on the Multigen must be performed by service personnel who have been approved by Burlodge.

To ensure the safe operation of the Multigen, the operating instructions set out in this User Manual must be adhered to at all times during the installation, operation and maintenance of the Multigen. In cases of doubt, or if problems arise that are not dealt with, or are not covered in sufficient detail in this manual, please contact Burlodge.

Before connecting the Multigen to the mains, make sure that the mains power*supply complies with the mains power specifications set out in this User Manual and with the relevant safety standards for electrical appliances.

The Multigen was designed and constructed for the purpose of Cook-Serve, Cook-Chill and Cook-Freeze food service applications. Burlodge accepts no liability for damage to persons or property, or, specifically, to the Multigen if such damage has resulted from the incorrect use, or from their use for purposes other than those for which these units were designed and constructed.

Instructions of particular importance in this manual are characterized by the following symbols:

Warning. This symbol indicates a warning and is explained in more detail in the accompanying text. Direct or indirect danger to life and limbs of the user and / or third parties when the instructions are not followed precisely.

Caution. This symbol indicates a caution and is explained in more detail in the accompanying text. Potential risk of injury or damage to property when the instructions are not followed precisely.



Read Operator's Manual before using this product.

Instructions related to Safe Operation

- > Always disconnect the appliance from the power supply before attempting to move it or carrying out any cleaning or maintenance work.
- > Never pull on the power cable to unplug it.
- > Some surfaces will be hot during and after a cycle.
- Always switch off the appliance when not in use.
- Service work should only be carried out by fully trained or authorised personnel.
- > Do not attempt to use the appliance if the power cable is damaged, worn or frayed. Call our Service Department or your Authorised Service Agent to replace the cable immediately.

- > Apply brakes whenever the Trolley is standing to prevent the Trolley from rolling away.
- > Brakes should only be operated with your foot and not by hand.
- The trolley can only be operated on flat and even surfaces and with the parking brakes active. In case of temporary placement on surfaces with inclination up to 4° (7%), the trolley must have the parking brakes engaged and must not be left unattended. Use on surfaces with steeper inclination is not endorsed
- > Never place this product close to any sources of heat i.e. gas ranges or dishwashers etc.
- Never use sharp instruments on the control panel fascia always use your fingers.
- The Multigen is fitted with a device designed to prevent electrostatic discharges (ESDs). If you find that users are suffering shocks caused by electrostatic discharges, attention should be paid to the surfaces of the floors along which the trolley is moved, and also to the clothes and footwear of the serving staff. Environmental factors such as heat or a dry atmosphere may also exacerbate the problem of ESDs.

This appliance is not intended for use by any person (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

3. Appliance Data

APPLIANCE TYPE: MULTIGEN

MODEL DESIGNATIONS:

Multiaen XS BLM51.120 - 1P/N/E - 220/240V 50Hz BLM51.320 - 3P/N/E - 380/400V 50Hz BLM51.720 - 3P/N/E - 208V 60Hz Multigen S BLM50.120 - 1P/N/E - 220/240V 50Hz BLM50.320 - 3P/N/E - 380/400V 50Hz BLM50.720 - 3P/N/E - 208V 60Hz **Multigen M** BLM52.120 - 1P/N/E - 220/240V 50Hz BLM52.320 - 3P/N/E - 380/400V 50Hz BLM52.720 - 3P/N/E - 208V 60Hz Multigen L BLM53.120 - 1P/N/E - 220/240V 50Hz BLM53.320 - 3P/N/E - 380/400V 50Hz BLM53.720 - 3P/N/E - 208V 60Hz

MANUFACTURER BURLODGE Srl Via CÁ BERTONCINA No 43 24068 Seriate (BG) Tel. 0039 035 4524900 Fax 0039 035 302994

The Multigen complies with the following harmonized European and North American directives:

DIRECTIVES: 2014/35/EU Low-Voltage Directive (LVD) 2014/30/EU Electromagnetic Compatibility (EMC) Directive 2006/42/EC Machine Directive 2011/65/EU Directive Restricting the Use of Certain Hazardous Substances (RoHS2)

The Multigen complies with the following European and North American standards (in their applicable version and with related Amendments):

SAFETY:

EN 60335-1 EN 60335-2-42 EN 60335-2-24 UL 197 UL 471 CSA C22.2#109 CSA C22.2#120 NSF 169

EMC:

EN 55014-1 EN 55014-2 EN 61000-3-2 EN 61000-3-3 EN 62233



4. Description of the Multigen

The Multigen is designed to provide a bulk meal service combining simplicity of use and appealing presentation. The Multigen series is also fitted various solution for heated tops and lit gantries to maintain food at the correct temperatures during service. Developed for Cook-Serve, Cook-Chill and Cook-Freeze applications, it allows food portioning and distribution closer than ever to your patients.

The dual temperature air convected oven enables you to regenerate products at different temperature settings within the same chamber thus having a high-quality regeneration (not applicable to XS and L).

The Multigen is controlled by an LCD control panel. Construction is in AISI 304 stainless steel with thermoformed exterior panels.



The **Multigen XS** has an air convected (not dual) oven and a cold compartment; both can be refrigerated. The oven compartment can fit up to 4 GN 1/1 grids and the cold compartment can fit 3 GN 1/1 grids.



The **Multigen S** has a dual air convected oven which can also be refrigerated. The compartment can fit up to 8 GN 1/1 grids.



The **Multigen M** has a dual air convected oven and a cold compartment; both can be refrigerated. Each compartment can fit up to 8 GN 1/1 grids.



The **Multigen L** has two air convected (not dual) ovens which can also be refrigerated. Each compartment can fit up to 8 GN 1/1 grids.

5. Unpacking

- 1. Remove outer box and inner packaging.
- 2. Remove straps and batons which are holding the wheels in position on the pallet.
- 3. Lift or roll the Trolley off the pallet carefully by means of a ramp. Do not drop the Multigen from the pallet onto the floor.
- 4. Always push and pull the Multigen from the left-hand side (control panel side) as it is the section where swivel wheels are mounted as standard.
- 5. All packaging must be disposed of in compliance with local laws and regulations.

🗥 Caution:

Ensure that no damage is caused to persons or to the trolley when unloading from the pallet by using a ramp or by following manual handling local safety guidelines.

6. Installation

- 1. Ensure that no nearby protruding edges or items can damage the trolley.
- 2. Ensure the power supply is located in a position where it cannot be damaged by the trolley and is easily accessible at all times.
- 3. Ensure that the supply cable is not over stretched.

✓ Warning:

- Before the trolley is set to work for the first time, tests should be performed to ensure that the electrical set-up complies with all applicable safety standards and accident-prevention regulations.
- > Ensure that the wall socket and the mains power wiring have been installed and earthed by a qualified electrician in accordance with recognized electrical safety standards.
- > Check that the local mains voltage complies with the rating specified on the trolley's ID plate.
- > The trolley should be connected to a switch-interlocked socket with a ground-fault circuit interrupter and an overcurrent protection device.

7. Control Panel

The Multigen is fitted with a touch Controls pads and LCD display Below is an overview. The screen used in shown when the trolley is in cycle



- $\succ\,$ Temperature values shown are examples only and are in °C.
- Audible Warnings
 - Quick intermittent beeps denote the alarm status
 - A slow intermittent beep denotes normal status, i.e. end of cycle
 - Every time a button is pressed a short beep sounds.

\Lambda Caution:

Do not use sharp instruments or excessive force on the touch pads as this could damage or shorten the life of the fascia.

a) Display when trolley is in OFF status

OFF

Trolley connected to main supply but not switched ON

b) Display when trolley is in Stand-by/Automatic start mode

Trolley connected to main supply in Stand-by mode. This means that the trolley will automatically switch itself ON

Caution: Do not carry out service work on the machine when in Stand-by/Automatic start mode. Note: > Stand-By is only displayed if the trolley has been programmed to do so. Display shows the actual time i.e. 11:35 and when the trolley will switch itself ON i.e. 12:01 c) Display outside an oven cycle Cold chamber temperature. Oven (not shown on S model) chamber temperature Horizontal line indicates hot top is off and temperature is displayed Cycle 1 Automatic start at 17:40 as 0 d) Display during the oven cycle Hot and cold temperatures Cycle 1 in operation 50 minutes cycle time Horizontal line with waves indicates hot top is ON and temperature is displayed to the right e) Display for L model only Note: > For the L model, there is an extra touch pad to control the two ovens outside an oven cycle (L model) i. Right oven chamber Left oven temperature chamber temperature Horizontal line with waves indicates hot top is on and temperature is displayed to the right (35

degrees)

ii. Display during the oven cycle (L model):



Cycles in operation -

8. THE FUNCTION MENU F

The F button (Function pad) enables you to access various functions

a) Food probing

Using the dedicated probe, food temperature can be recorded and associated to product types. You can choose between 8 different food items (Soup, Protein, Carbohydrate, Vegetable, Cold Item, Dessert and Others), each with 4 entries (a, b, c and d). A total of 32 products can be recorded.

- 1. Connect the food probe to the external white socket on the trolley.
- 2. Remove one product at a time from the oven or cold side and close the door.
- 3. Insert the probe into the centre of the food product.
- 4. Press the F Function pad once
 - The product temperature will be displayed and the first food item will be highlighted.
 - Using touch pads 1 (ψ) and 2 (\uparrow), select the desired food item (i.e. Soup a).
- 5. Ensure that the maximum temperature has been reached on the food probe and press touch pad 3. If using a dedicated Burlodge probe with a button, you can also press and release
 - (within two seconds) the probe button to record the temperature.
 - An audible long beep will follow to confirm that the data has been recorded.
 - The display will indicate the temperature just recorded i.e. 74°C and the next entry will be highlighted.

Note:

- Make sure that the probe is sanitized in between and before every use by using an antiseptic wipe.
- > Only use a dedicated Burlodge food probe
- > The temperature read out of the probe will only be displayed when not in a cycle
 - If only a short beep is heard or no beep occurs, the probe button or touch pad 3 must be pressed again.
- If three dashes (- -) are displayed, the probe is not connected or is faulty. It will revert to normal display after 2 seconds.









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- When probing, be aware of hot surfaces and tray ware temperatures use appropriate safety wear.
- > Do not place the probe or measure temperatures inside either the oven or refrigerated chambers.
- > Do not use the probe on frozen products.
- > Do not overstretch the probe cable as this may cause damage to the wiring either at the plug end or probe end.

b) Wastage menu

The Wastage Function allows the user to notify the kitchen how many portions, at the end of each meal, are wasted

- 1. Press the F pad twice to access the wastage menu
- 2. Once in the wastage menu, use touch pad 1 (ψ) and 2 (\uparrow) to select the menu item which you wish to record as wastage
- 3. Press touch pad 3 to confirm
- 4. Using touch pads 1 and 2, select the number of portions wasted
- 5. Press touch pad 3 to confirm
- 6. Repeat process to record all items
- 7. Press F key several times to exit

Here is an example of wastage of 3 portions of proteins and of 4 portions of carbohydrates

All wastage recorded will be logged to the trolley memory

c) Maintenance cycle

This function allows the user to keep the oven, fridge, hot top and lights on during food service.

- 1. Press the F pad three times to access the Maintenance cycle
- 2. To start and to stop the Maintenance cycle, press touch pad 3

d) Oven Cleaning Cycle

This function facilitates cleaning of the oven chamber

- 1. Put a pan in the oven containing ½ litre water and detergent.
- 2. Close the oven door.
- 3. Press the F pad four times to access the Cleaning cycle
- 4. To start the Cleaning cycle, press touch pad 3
- 5. At the end of the cycle, disconnect the trolley from the mains power.
- 6. Open the oven door and, once the temperature is safe to work with, remove the pan
- 7. Clean, wipe down and rinse the oven chamber

Note:

- The cycle time and temperature should be set in the parameters and should be set to take into account the level of baked on debris that needs to be softened by the steam from the pan to facilitate cleaning of the oven chamber
- > During this cycle, fridge, heated top plate and lights will be OFF.

e) Time and date

Press the F pad five times to view actual time and date

9. Light and Heated Top Plate touch pad

This touch pad controls both the light and heated top plate

1. Press the touch pad to switch the lights and heated top plate ON or OFF. Note:













- The lights and heated top plate will automatically come back on if they were left on when the trolley was last switched off
- > The top plate icon (waves) indicates that the heated top is on

10. Programming

a) Access to Programming Mode

- 1. Ensure trolley is OFF or in Stand-by
- Simultaneously firmly press touch pads 1 and 3. Keeping these pressed down, press the ON touch pad and the following display will appear: Display will show firmware revision and trolley serial number.
- 3. Press touch pad 2 to enter into the first parameter. Scroll through the parameters using touch pad 3. The selected parameter will flash
- 4. Set each parameter value using touch pads 1 and 2 and then press 3 to enter and move to the next parameter
- 5. When you have finished programming, press ON/OFF to exit

Note:

- > In order to facilitate the entry of the parameters that can be set, they have been divided into different groups, as shown below:
 - Group 0 = system settings
 - Group 1 = settings for the regeneration Cycle 1
 - Group 2 = settings for the regeneration Cycle 2
 - Group 3 = settings for the regeneration Cycle 3
 - Group 4 = maintaining and cleaning cycle
 - Group 5 = settings for the automatic start timer
 - Group 6 = actual time and date, daylight saving
- > The following tables summarise both the range of values that can be modified and the preset default values.

b) Group 0 - system settings



| Multigen XS/S/ | Ν | Values | | | | | | | | |
|-------------------------------------|------------------------------------------|---------------------|-----|---------------------|------------------------------|-------------------------------|--|----------------------------------------------|---------------|------------------|
| Settings | Symbol/icon or position on display | Default settings | | Default settings | | Default settings | | Individual settings (user to complete) | Allowab °C | le range / °F |
| | | °C | °F | | °C | °F | | | | |
| Fridge Temperature optional* | * | 04 | 39 | | 000 ⇔ 025 (OFF) | 032 ⇔ 077 (OFF) | | | | |
| Oven Cold Temperature optional** | ** 8 | 07 | 45 | | 000 ⇔ 025 (OFF) | 032 ⇔ 077 (OFF) | | | | |
| Refrigeration Hysteresis | Δ | 02 | 02 | | 002 ⇔ 005 | 3.6 ⇔ 9 | | | | |
| Security 1*** | SC1 | off | off | | (T fridge + 1) ⇔ 44 - OFF | (T fridge + 1) ⇔ 111 - OFF | | | | |
| Heat top plate | 2322 | 80 | 176 | | 50 ⇔ 90 | 122 ⇔ 194 | | | | |
| Touch Pad Lock (Smart Card) | | 1 | 1 | | Y (locked)**** < | ⇒ N (unlocked) | | | | |
| Temp. (°C or °F) | °C/°F | 00 | | 00 (°C) ⇔ 00 | | ⇒001 (°F) | | | | |

* Must be set to OFF for Multigen S.

** **Must be set to OFF for Multigen XS or M with single fridge only.** If set to the OFF position for Multigen S or Multigen XS or M with double fridge, the refrigeration in the oven chamber will be switched off. However, the refrigeration can work during a cycle by setting the refrigeration parameter in the cycle settings (see parameter 'fridge temp during cycle 1, 2 or 3').



*** **Must be set to OFF for Multigen S**. For Multigen XS or M, the minimum setting of security 1 is the fridge set temperature +1 °C degree

**** If you set the touch pad lock parameter to Y, the key pad will immediately lock. You must either insert a BCardWise to confirm or switch off the trolley and can only be unlocked by either switching off the machine or using a BCardWise card (Touch pad Lock chapter)

| Multigen L | | | | Values | | | | | | |
|-------------------------------------------------------|------------------------------------------|---------------------|-----|---------------------|------------------------------|-------------------------------|--|----------------------------------------------|---------------|------------------|
| Settings | Symbol/icon or position on display | Default settings | | Default settings | | Default settings | | Individual settings (user to complete) | Allowab °C | le range / °F |
| | | °C | °F | | °C | °F | | | | |
| Fridge temperature in left side Oven optional* | 9 | 04 | 39 | | 000 ⇔ 025 (OFF) | 032 ⇔ 077 (OFF) | | | | |
| Fridge temperature in right side Oven optional* | 96 | 04 | 39 | | 000 ⇔ 025 (OFF) | 032 ⇔ 077 (OFF) | | | | |
| Refrigeration Hysteresis | Δ | 02 | 02 | | 002 ⇔ 005 | 3.6 ⇔ 9 | | | | |
| Security 1** | SC1 | off | off | | (T fridge + 1) ⇔ 44 - OFF | (T fridge + 1) ⇔ 111 - OFF | | | | |
| Heat top plate | 2322 | 80 | 176 | | 50 ⇔ 90 | 122 ⇔ 194 | | | | |
| Touch Pad Lock (Smart Card) | | 1 | 1 | | Y (locked)*** < | ⇒ N (unlocked) | | | | |
| Temp. (°C or °F) | °C/°F | 00 | | 00 000 (°C) ⇔ 001 | | ⇒001 (°F) | | | | |

* If set to the OFF position, the refrigeration in the oven chamber will be switched off. However, the refrigeration can work during a cycle by setting the refrigeration parameter in the cycle settings (see parameter 'fridge temp during cycle).

c) Groups 1,2 and 3 – settings for regeneration Cycles 1, 2 and 3

The Multigen S and M are designed with a dual oven. This dual temperature, air convected oven enables the regeneration of products at different temperature settings within the same time thus having a high-quality regeneration, without the need for split loading.



To achieve this, the ovens need to be set correctly as per the three stages below:

Stage 1: Phase 1 heating of both top and bottom ovens (applicable to Cycles 1, 2 and 3) – for Multigen S and M only **Stage 2**: Both ovens are running with time and temperatures as set

Stage 3: "Gratination" that occurs on top oven only, while bottom oven will continue to run at temperature specified before.

| Multigen S/M | | | | | Values | | |
|---------------------------------------------|-------------|------------------|-----|----------------------------------------------|----------|-----------|-----------|
| Settings Symbol/icon or position on display | | Default settings | | Individual settings (user to complete) | Allowabl | e range | |
| | | | °C | °F | | °C | °F |
| | Temperature | | 120 | 248 | | 000 ⇔ 170 | 032 ⇔ 338 |
| Phase I | Time | Phase I settings | 02 | 0* | | 000 ⇔ | 20' ** |

*Must be OFF for Multigen XS and L as there is no dual oven

**Phase 1 maximum time can be 20 minutes, however if the cycle is: top oven time – gratination time – 1 minute = <20 minutes, phase 1 maximum time will be reduced accordingly



Gratination settings

Fridge settings during cycle

Cycle

| | Multigen XS/S/M | | Values | | | | |
|----------|-----------------------------------|------------------------------------|-----------|----------|----------------------------------------------|--------------------|--------------------|
| Settings | | Symbol/icon or position on display | Default s | settings | Individual settings (user to complete) | Allowable | e range |
| | | | °C | °F | | °C | °F |
| | Top Oven Set Temp. | Top oven | 145 | 293 | | 0 ⇔ 170 | 032 ⇔ 338 |
| Cycle 1 | Total Cycle 1 Time | settings | 60 |) | | 003 ⇔ 99 | minutes |
| | Bottom Oven Set Temp. | Bottom oven | 120 | 293 | | 060 ⇔ 170 | 140 🗇 338 |
| | Total Bottom Oven Cycle Time** | settings | 02 | 0 | | 000(OFF) ⇔ ov | en top time |
| | Gratination Temp. | Gratination | 145 | 293 | | 0 ⇔ 170 | 032 ⇔ 338 |
| | Gratination Time | settings | 00 | 5 | | 0 min < | ⇒ *** |
| | Fridge Temp during Cycle 1* | Fridge setting | 4 | | | 000 ⇔ 025 (OFF) | 032 ⇔ 077 (OFF) |
| | Top Oven Set Temp. | Top oven | 145 | 293 | | 0 ⇔ 170 | 032 ⇔ 338 |
| Cycle 2 | Total Cycle 2 Time | settings | 05 | 5 | | 003 ⇔ 99 | minutes |
| | Bottom Oven Set Temp. | Bottom oven | 120 | 293 | | 060 ⇔ 170 | 140 🗇 338 |
| | Total Bottom Oven Cycle Time** | settings | 02 | 0 | | 000⇔over | top time |
| | Gratination Temp. | Gratination | 145 | 293 | | 0 ⇔ 170 | 032 ⇔ 338 |
| | Gratination Time | settings | 00 | 5 | | 0 min < | ⇒ *** |
| | Fridge Temp during Cycle 2* | Fridge setting | 4 | | | 000 ⇔ 025 (OFF) | 032 ⇔ 077 (OFF) |
| | Top Oven Set Temp. | Top oven | 145 | 293 | | 0 ⇔ 170 | 032 ⇔ 338 |
| Cycle 3 | Total Cycle 3 Time | settings | 05 | 0 | | 003 ⇔ 99 | minutes |
| | Bottom Oven Set Temp. | Bottom oven | 120 | 293 | | 060 ⇔ 170 | 140 🗇 338 |
| | Total Bottom Oven Cycle Time** | settings | 02 | 0 | | 003⇔over | top time |
| | Gratination Temp. | Gratination | 145 | 293 | | 0⇔170 | 032 ⇔ 338 |
| | Gratination Time | settings | 00 | 5 | | 0 min < | ⇒ *** |
| | Fridge Temp during Cycle 3* | Fridge setting | 4 | | | 000 ⇔ 025 (OFF) | 032 ⇔ 077 (OFF) |

* Must be set to OFF for Multigen S
 ** Must be set to OFF for Multigen XS
 *** Maximum gratination time = bottom oven time – phase 1 – 1 min

| Multigen L | | | | | Values | | |
|------------|-------------------------|------------------------------------|------------------|-----|----------------------------------------------|-----------------|---------------|
| Settings | | Symbol/icon or position on display | Default settings | | Individual settings (user to complete) | Allowable range | |
| | | | °C | °F | | °C | °F |
| | Left Oven Set Temp. | Left oven | 140 | 284 | | 0⇔170 | 032 ⇔ 338 |
| Cycle 1 | Total Left Cycle Time | settings | 45 | 5 | | 000 ⇔ 99 i | minutes |
| | Left Gratination Temp. | Gratination | 80 | 176 | | 0⇔170 | 032 ⇔ 338 |
| | Left Gratination Time | settings | 00 | 2 | | 000(off) ⇔ Tot | al Left Time |
| | Right Oven Set Temp. | Right oven | 140 | 284 | | 000 ⇔ 170 | 140 ⇔ 338 |
| | Total Right Cycle Time | settings | 45 | | | 000 ⇔ 9 | 9 min |
| | Right Gratination Temp. | Gratination | 80 | 176 | | 0⇔170 | 032 ⇔ 338 |
| | Right Gratination Time | settings | 00 | 2 | | 000(off) ⇔ Toto | al Right Time |

| | Left Oven Set Temp. | Left oven | 140 | 284 | 0⇔170 | 032 ⇔ 338 |
|---------|-------------------------|-------------|-----|-----|-----------------|---------------|
| Cycle 2 | Total Left Cycle Time | settings | 4. | 5 | 000 ⇔ 99 | minutes |
| | Left Gratination Temp. | Gratination | 80 | 176 | 0⇔170 | 032 ⇔ 338 |
| | Left Gratination Time | settings | 00 |)2 | 000(off) ⇔ Tot | al Left Time |
| | Right Oven Set Temp. | Right oven | 140 | 284 | 000 ⇔ 170 | 140 ⇔ 338 |
| | Total Right Cycle Time | settings | 4. | 5 | 000 ⇔ 9 | 9 min |
| | Right Gratination Temp. | Gratination | 80 | 176 | 0⇔170 | 032 ⇔ 338 |
| | Right Gratination Time | settings | 00 |)2 | 000(off) ⇔ Toto | al Right Time |
| | Left Oven Set Temp. | Left oven | 140 | 284 | 0⇔170 | 032 ⇔ 338 |
| Cycle 3 | Total Left Cycle Time | settings | 4. | 5 | 000 ⇔ 99 | minutes |
| | Left Gratination Temp. | Gratination | 80 | 176 | 0⇔170 | 032 ⇔ 338 |
| | Left Gratination Time | settings | 00 |)2 | 000(off) ⇔ Tot | al Left Time |
| | Right Oven Set Temp. | Right oven | 140 | 284 | 000 ⇔ 170 | 140 ⇔ 338 |
| | Total Right Cycle Time | settings | 4. | 5 | 000 🗇 9 | 9 min |
| | Right Gratination Temp. | Gratination | 80 | 176 | 0⇔170 | 032 ⇔ 338 |
| | Right Gratination Time | settings | 00 |)2 | 000(off) ⇔ Toto | al Right Time |

d) Group 4 – Temperature Maintenance and Cleaning cycle

Temperature Maintenance Cycle is intended to operate during food service and keeps hot food in the oven chamber.

Cleaning cycle is intended to operate with a special detergent container put in the oven chamber.



| | | | | Values | | | | |
|--------------------|-------------|---------------------|----------|-----------|-----|-------------------|-----------------|----------|
| Settings Symbol/id | | Symbol/icon or | | Default | | Individual | Allowable range | |
| | | position on display | | settings | | settings (user to | | |
| | | | | complete) | | | | |
| | | | °C | °F | | °C | °F | |
| Maintaining | Temperature | N A | Sottings | 80 | 176 | | 0⇔170 | 32 ⇔ 338 |
| cycle | Time | 1~1 | senings | 30 |) | | 0 min ⇔ 99 | minutes |
| Clagning avala | Temperature | my | Sattings | 90 | 194 | | 0 ⇔ 90 | 32 ⇔ 194 |
| Cleaning cycle | Time | - | senings | 30 |) | | 0 min ⇔ 99 | minutes |

e) Group 5 – automatic wake up and cycle settings

It is possible to program three automatic wake-ups and three automatic start oven cycles with related options per day.



You can set days 1-5 (week days) and days 6-7 (weekend). Days 1-5 appear in the first screen and days 6-7 appear in a second screen

| | | | | Values | |
|-----------------------------|-----------------|---------------------|----------|---------------------|-----------------|
| S | ettings | Symbol/icon or | Default | Individual settings | Allowable range |
| | | position on display | settings | (user to complete) | |
| 1 st meal of the | Wake – Up time | | OFF | | 02:00 ⇔ 23:59 |
| day | Cycle number | | OFF | | OFF ⇔ 03 |
| | Oven cycle Time | | OFF | | 02:00 ⇔ 23:59 |
| | Options | | 001 | | 001 ⇔ 001 |
| 2 nd meal of | Wake – Up time | | OFF | | 02:00 ⇔ 23:59 |
| the day | Cycle number | | OFF | | OFF ⇔ 03 |
| | Oven cycle Time | | OFF | | 02:00 ⇔ 23:59 |
| | Options | | 001 | | 001 ⇔ 001 |
| 3 rd meal of the | Wake – Up time | | OFF | | 02:00 ⇔ 23:59 |
| day | Cycle number | | OFF | | OFF ⇔ 03 |
| | Oven cycle Time | | OFF | | 02:00 ⇔ 23:59 |
| | Options | | 001 | | 001 ⇔ 001 |

As an example, to program an automatic cycle having:

- ▶ Trolley waking up at 07:01
- > Oven cycle 2 starting at 07:30
- > Heated top plate switching on only after regeneration cycle
- 1. With touch pads 1 and 2 select wake up time as 07:01. Press touch pad 3 to confirm
- With touch pads 1 and 2 select oven cycle 2. Press touch pad 3 to confirm
 With touch pads 1 and 2 select automatic start at 07:30. Press touch pad 3 to confirm
- With touch pads 1 and 2 select to have heated top plate on, after regeneration only. Press touch pad 3 to confirm
- 5. Switch OFF the trolley.



Note:

- > Wake up can be disabled by placing wake up time identical to automatic start time.
- It is possible to set a wake up time without an automatic cycle start: trolley will wake up automatically and regeneration cycle must be started manually.
- > If lights are programmed as an option, they will only turn on automatically at cycle end.
- If heated top plate is programmed, it will work during oven cycle (only when oven is up to temperature) and continue working at its set temperature after the cycle has ended.
- > To erase an automatic cycle, set the wake up time the same as the cycle time. Set the cycle number to 0. OFF should appear on both sides of the screen.

f) Group 6 – date and time

Group 6 allows you to program the date and time



| | | | | Values | |
|---------------------------------------------|-----------------|--|---------------------|-------------------------------------------|-----------------|
| Settings Symbol/icon or position on display | | | Default settings | Individual settings (user to complete) | Allowable range |
| Date/Time | Year | | 06 | | |
| | Month | | 08 | | |
| | Day | | 18 | | |
| | Day of the week | | 02 | | |
| | Hour | | 00 | | |
| | Minutes | | 00 | | |

g) Group 7 – daylight saving

Group 7 allows you permit to program the daylight savings jump dates

Note:

- ⊕→⊕ ^{Month} Day 03 30
- When programming the daylight savings, the date to insert will correspond to the "Sunday"; e.g., if the 1 hour shift is expected to happen during the night between 29 and 30 March, the date to program is March 30.

> In case no daylight savings are needed the same date has to be put in the two slots.

| | | | Values | |
|-----------------------------|------------------------------------|---------------------|-------------------------------------------|-----------------|
| Functions | Symbol/icon or position on display | Default settings | Individual settings (user to complete) | Allowable range |
| Month for hour increase (+) | | 03 | | 01 to 12 |
| Day for hour increase (+) | | 25 | | 01 to 31 |
| Month for hour decrease (-) | | 10 | | 01 to 12 |
| Day for hour decrease (-) | | 29 | | 01 to 31 |

11. Manual Cycle

a) Multigen XS, S, M

Once the Trolley has been switched ON, it automatically starts in refrigeration mode on both hot and cold sides (dependant on refrigeration options fitted).

- 1. To start a cycle press one of the cycle buttons (1, 2 or 3). The selection is accompanied by a single beep.
- 2. Two minutes before the end of the cycle, the timer will flash to inform the user that the cycle is near completion
- 3. At the end of a cycle, when the trolley beeps and the timer flashes "00", press the cycle button of the cycle in operation to end the cycle.
 - Note:
 - > If the oven side door is opened while in cycle, the door open alarm will be activated and the door open icon will appear on the display (in place of the timer)
 - > The refrigeration will carry on working until the trolley is switched OFF

b) Multigen L

The Multigen L has two ovens; left and right and an additional 'Left or Right oven touch pad' to select them This touch pad allows the left or right ovens to be used independently.

- There are 2 ways of using the Multigen L: i. Ovens working independently
 - ii. Ovens working in parallel
 - II. Ovens working in parallel

i. Ovens working independently

Starting and/or Stopping the Left side

- 1. Press the L/R Oven touch pad once to select the Left oven
- 2. Press Cycle (1, 2 or 3) touch pad
- 3. Press the L/R Oven touch pad to confirm
- 4. On the right hand side, the timer symbol will flash.
- 5. To stop the oven, press the Cycle (1, 2 or 3) selected



- 1. Press the L/R Oven touch pad twice to select the Right oven
- 2. Press Cycle (1, 2 or 3) touch pad within 10 seconds
- 3. On the left hand side, the timer symbol will flash.
- 4. To stop the oven, press the Cycle (1, 2 or 3) selected

Note:

- Repeat the process to start or stop an oven when the other oven is already in cycle
- To start both ovens at the same time and on the same cycle, press the Cycle button (1, 2 or 3) and both ovens will start
- When both ovens are in cycle, pressing any of the Cycle buttons without first pressing the L/R Oven touch pad, will switch off both ovens







ii. Ovens working in parallel

Both oven cycles finishing at the same time (different cycle times)

- 1. Press the L/R Oven touch pad
- 2. Press Cycle (1, 2 or 3) touch pad to select left oven cycle
- 3. While the right oven symbol is flashing, press Cycle (1, 2 or 3) for right side oven
 - Note:
 - The timer of the shorter cycle will flash to indicate that it has been delayed. It will start at such a time to ensure that the two ovens finish simultaneously

12. Touch pad lock

The touch pad can be locked and unlocked using BCardWise card.

Setting the touch pad lock

- 1. Insert the BCardWise card into the slot
- 2. Set the password parameter to Y (see Programming chapter)
- 3. Press 3 to confirm and lock the keypad
- 4. Remove BCardWise card

To unlock and use the trolley when touch pad is set to lock

- 1. Ensure trolley is switched off at the mains
- 2. Insert the BCardWise card
 - The display will show code number and user name and the trolley is now unlocked

Note:

- > The trolley will store an event with time and user
- This event is only logged once after each power ON with the same BCardWise card. However, insertion of a new BCardWise card will record a new event with a new user.

13. Reset CPU

The trolley can be forced into reset mode or can fall in to reset mode due to system fault.

- 1. Press touch pads 1 and 3 simultaneously. While still holding them down, press the ON touch pad
- 2. Release the 3 buttons and press touch pad 1 three times within 10 seconds
- 3. A timer icon will appear. Please wait until it finishes the reset without interrupting
- 4. Press touch pad 3. "Serial n" will appear, flashing.
- 5. Press touch pad 3 to insert the first 2 digits of the serial number (use touch pads 1 and 2 to move up and down). Repeat for the other 4 digits.
- 6. Press 3 again to return to "Serial n" (flashing).
- 7. Press touch pad 2 to access programming (see relevant chapter) and reprogram trolley accordingly including time and date.

Note:

- If the correct serial number and the time and date are not inserted the trolley will revert to RESET mode at next power on.
- > The 6-digit serial number can be found on the trolley's data plate

14. Events Logger Menu (Datalog)

The Event Logger (Datalog) allows all events to be recorded with time and temperature. Events can be viewed on the display or downloaded via Wi-Fi/LAN (optional) or BCardWise+.

| Progressive event number | 010 Power Off | Event description |
|-----------------------------|---------------|--------------------------|
| Event timing | | Cold side temperature |
| | | |







a) Viewing Event Logger menu

- 1. Press touch pad 1 and ON/OFF simultaneously. The word "Events" will appear on the display.
- 2. Press touch pad 3 to confirm. The latest event will appear.
- 3. To scroll the events list press touch pad 2 (up) and 1 (down).
- 4. To exit the events list press the "F" key.

b) Downloading the events list on the BCardWise+ Card

- 1. Press touch pad 1 and ON/OFF simultaneously. The word "Events" will appear on the display.
- 2. Press touch pad 2 to scroll to Datalog.
- 3. Insert the BCardWise+ card and wait a few seconds. The BCardWise+ card icon will appear. (Note the + sign on the card icon).
- 4. An icon will appear prompting the user to remove the BCardWise+ card. x/32 will be displayed showing that the data from x of 32 trolleys has been downloaded to the BCardWise+ card

15. Copying and pasting the trolley program using BCardWise card

Copying a trolley program

This feature will allow the user to copy the setup from the trolley onto the BCardWise card.

- 1. Press touch pad 1 and the ON touch pad simultaneously. The word "Events" will appear on the display.
- 2. Press touch pad 2 twice to scroll to the "Program" menu.
- 3. Insert the card and wait a few seconds. A new icon will appear prompting the user to remove the BCardWise card.
- 4. Remove the BCardWise card.

Note:

If an error icon appears with "? Program" it indicates that the program has not been copied correctly. See 'Error Codes' chapter

Pasting a trolley program

This feature allows the user to quickly program the trolley using the BCardWise card with a copy of a program from another trolley.

- 1. Press touch pad 2 and the ON touch pad simultaneously. The word "Program" and a BCardWise icon will appear on the display.
- 2. Release the touch pads and insert the BCardWise card into the card reader. The username will be displayed.
- 3. The program will be uploaded (a few seconds) and the remove BCardWise card icon will appear.
- 4. Remove the BCardWise card
- 5. Press the ON/OFF touch pad to exit from programming mode.

16. Changing the events list language

The events list and other text strings can be examined in different languages. The user can choose between **English**, **Italian**, **French**, **German and Dutch** using the following procedure:

- 1. Press touch pad 1 and the ON touch pad simultaneously. The word "Events" will appear on the display.
- 2. Press touch pad 2 three times to scroll to the language menu. The current language will appear on the display
- 3. Press touch pad 3. The word will flash.
- 4. Select the required language using touch pads 1 and 2.
- 5. Press touch pad 3 to confirm the new language.



BCard

Datalog









17. Monitoring the signal communication (Option)

This function allows the user to check that the trolley is communicating with the HACCP monitoring system (BWise/BCloud)



- 1. Press touch pad 1 and the ON touch pad simultaneously. The word "Events" will appear on the display.
- 2. Press the touch pad 2 four times to scroll to the Line menu.
- 3. If the trolley is receiving a signal the word "In" will appear next to the computer icon. When the trolley recognises its slave/IP address and sends out the answer, the word "Out" will appear. If nothing appears the trolley is not communicating.

18. Special features

a) Control panel battery – program memory and power supply failure

The control panel has a battery that memorises programming and power failures. In the case of a power failure outside a cycle, the trolley will switch itself back on when power returns. If the power failure occurs during an oven cycle, the cycle will continue from where it was interrupted as long as the temperature is above 70°C (158°F). If the temperature is below this threshold, the cycle will be cancelled.

Note:

The battery needs to be replaced approximately every 4 years. Contact the Burlodge Technical Department.

b) Battery Display System (Optional)

This allows the control panel and display to be switched on for a period of 30 seconds powered only by the battery. The display will function normally and allow for food temperature recording with external food probe. The control panel will automatically switch off after 30 seconds. Pressing ON touch pad again, will re-start the 30 seconds. The battery also supplies a trace mode where temperatures are recorded every 10 minutes while the trolley is switched off and for a maximum of 1 hour.

Note:

- If the display does not come on, the battery has been run flat and the trolley needs to be connected to the mains
- Re-connecting the trolley to the mains will reactivate the 1-hour trace period until the battery runs flat

c) Boost cycle

This allows the user to start an additional, 5-minute boost cycle allowing to boost food temperature when the food has not reached the required temperature.

1. To start a boost cycle, press touch pad 3 for 5 seconds.

Note:

- ▶ Boost cycle will only start if both the oven temperatures are higher than 70°C.
- > During boost cycle refrigeration, heated top plate and lights work as during a normal oven cycle.

d) Cold temperature threshold - Security 1 (SC1)

This feature ensures that the cold section is cooled down before the oven cycle starts. If the cold section temperature is above the temperature set in the program (SC1), the oven cycle will not start. The refrigeration will continue to work and the oven cycle will start automatically when the set temperature has been reached

19. Hidden Menu

a) Verifying the firmware version

1. When display is OFF, press cycle 2 touch pad and ON touch pad simultaneously



b) Updating the firmware

- 1. Disconnect trolley from the power
- 2. Insert a BCardWise+ card programmed with the new firmware release



- 3. Reconnect power supply and wait approximately 90 seconds
- 4. You can now remove the BCardWise+ card and the update has been completed

c) Accessing the hidden parameters

These instructions apply to software from version 2.15 onwards.

All these settings in this part of the program will remain in the memory even if the trolley is reset or the firmware upgraded.

- 1. Disconnect trolley from the power
- 2. Press cycle 3 touch pad and the light and heated top plate touch pad simultaneously. Keeping these pressed, press ON touch pad
- 3. The first parameter will appear. Use touch pads 1 and 2 to scroll through the parameters and press touch pad 3 to enter into and set a parameter

i. Banner

This parameter will select if Burlodge is shown at start up. Burlodge showing is the default setting

- 1. Press touch pad 3 to enter into the banner parameter
- 2. Use touch pad 1 and 2 to select Y for Burlodge logo and N for no logo
- 3. Press touch pad 3 to confirm and exit

ii. Vis Technique

This parameter selects the display mode:

- > Single display (default) displays top oven temperature only,
- > Double display displays temperature for both top and bottom ovens,
- 24 hour dual display holds the double display for 24 hours only and then reverts to single display mode. Required for calibration/testing
- 1. Press touch pad 3 to enter into the Vis Technique parameter
- 2. Use touch pad 1 and 2 to select required option
- 3. Press touch pad 3 to confirm and exit

iii. Back Light

This parameter allows the display light to be switched off automatically at a set time. This extends the life span of the display. The default is for the display to be on 24 hours.

This should always be set so the display turns off when not in use. The default time is to switch ON at 06.00 and to switch OFF 20.00.

- 1. Press touch pad 3 to enter into the Back Light parameter
- 2. Use touch pad 1 and 2 to select either no back light timer or to select a backlight timer with the appropriate times
- 3. Press touch pad 3 to confirm and exit

iv. Calibration W

This parameter allows the calibration of the clock speed.

- 1. Press touch pad 3 to enter into the Calibration W parameter
- 2. Use touch pad 1 and 2 to decrease or increase the seconds
- 3. Press touch pad 3 to confirm and exit

Note:

- > The default is 0 and can be adjusted by 120 seconds per day.
- > For every 1 second you will gain or lose 6 minutes each year
- > You should not adjust by more than +/- 5 seconds

v. Clock Change (Summer/Winter time change)

This parameter enables or disables the automatic time change for summer and winter time.







- 1. Press touch pad 3 to enter into the Clock Change parameter
- 2. Use touch pad 1 and 2 to select the region (Europe (default), North America, Australia, South America or NO DTS)
- 3. Press ON touch pad and while still pressed, press touch pad 3; a long beep will confirm the change.
- 4. The next screen will show the date menu. You can scroll the stored settings for the next 15 years.
- 5. If no modifications are necessary, turn the trolley OFF to quit the set up menu.
- 6. It is possible to manually edit the clock change days each year for any countries/continents which are not listed
- 7. You must set the year, press confirm and then you can access the date parameter. This can be done for a number up to 15 years
- 8. Confirm by pressing the OFF touch pad, and while still pressed, press touch pad 3.
- 9. A long beep confirms the change and the new values have been recorded

Note:

- > If a country does not use the daylight time saving, set clock change on NO DTS.
- Unless necessary, do not modify the dates displayed.

vi. Fridge (Refrigeration settings)

This parameter allows the activation of the refrigeration in the oven section (optional). This parameter needs to be set in accordance to the trolley specification i.e. refrigeration on cold section only (single fridge) or cold section and oven (double fridge). When set to single refrigeration, it will prevent the accidental programming of the oven side refrigeration.

- 1. Press touch pad 3 to enter into the Fridge parameter
- 2. Use touch pad 1 and 2 to select Y for single fridge and N for double fridge (oven and cold section)
- 3. Press touch pad 3 to confirm and exit

Note:

Do not program a single fridge trolley with double refrigeration settings as it will cause refrigeration issues

20. Probe Calibration

The calibration function uses only the °C and you cannot set the temperature (in this particular option) in °F. Therefore it is necessary, in those countries where Fahrenheit is used, to convert desired calibration values from °F to °C and enter them in this procedure. If the parameter (°C/°F) is set to °F the firmware will automatically recalculate the right values (in the desired metric) during normal operation of the trolley.

E.g. If you want to calibrate at 32°F insert in t. low 0°C . The firmware will automatically use 32°F as t. low value.

The type of sensors fitted are PT1000

There are 2 ways to calibrate the trolley – either with a calibrator (available from Burlodge UK) or by using ice and hot water baths with an additional calibrated thermometer.

The following probes can be calibrated:

- ➢ ST1 = Cold chamber
- ST2 = Top oven
- ST3 = Bottom oven
- ST4 = Food probe

a) Calibration with the calibrator

- 1. Remove ABS panel
- 2. Disconnect the multi pin connector which connects the probes to the CPU board
- 3. Connect the calibrator's multi pin connector to the CPU board and switch on the transformer









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- 5. To access calibration menu, press touch pad 3 and F touch pad simultaneously. While keeping them held down, press the ON touch pad
- TI ST1 1000 will appear. Press touch pad 3 to enter.
- Select the probe to be calibrated with touch pads 1 and 2 (ST1, ST2, ST3 or ST4)
- 8. Press touch pad 3 to confirm and t.low will appear next to the probe number
- 9. Press touch pad 3 again and the display shows the calibration temperature registered during the last calibration

4. Set the trolley to 24-hour dual display (see Vis Technique paragraph) before commencing calibration

- 10. Set the calibrator to 0° C
- 11. Using touch pads 1 and 2, modify the value on the trolley display (if necessary) by setting it according to value shown on the calibrator
- 12. Press touch pad 3 to confirm. A long beep confirms the recording of the new calibration
- 13. Proceed the same way, switching from t. low to t. high with cycle 2 button.
- 14. Repeat step 8 to step 11 but this time setting the calibrator to the high set temperature i.e. 150°C
- 15. The probe is now calibrated both for its low and high settings.
- 16. Repeat the procedure for the other probes as required (i.e. ST1, ST2, ST3 and/or ST4). Note: when setting ST4 probe (external probe) for t.high, the calibrator should be set to 75°C (instead of 150°C) for better precision

b) Manual calibration for hand held food probe

- 1. Set the trolley to 24-hour dual display (see Vis Technique paragraph) before commencing calibration
- 2. To access calibration menu, press touch pad 3 and F touch pad simultaneously. While keeping them held down, press the ON touch pad
- 3. Select ST4 (external food probe) with touch pads 1 and 2
- 4. Plug the food probe into the external probe socket
- 5. Dip the probe into an ice bath together with a thermometer
- 6. Adjust temperature on the trolley display to match the reading on the thermometer and press touch pad 3 to confirm. A long beep confirms the recording of the new calibration.
- 7. Proceed the same way, switching from t. low to t. high with cycle 2 button and this time putting the probe into a boiling hot water bath.
- 8. The probe is now calibrated both for its low and high settings.
- 9. To calibrate remaining probes in the same way, replace the connection of the installed probe with a spare PT1000 and proceed as above from step 5-8.

Note:

> Use the ON touch pad to go back one step at any point during the procedure

21. Dual Oven Loading (not applicable to XS or L model)

Our intelligent convected dual oven technology (2 fans independently time and temperature controlled), combined with smart controls and oven temperature dynamic feedback, can precisely split the temperature within one heating chamber. Delicate and denser foods can be served at the same time at optimal temperature and quality.

a) Loading your dual oven

- 1. Remove lids from any containers of food that require browning or crisping according to the food manufacturer's instructions.
- 2. Place dense items on the upper grids and delicate items on the lower grids.
- 3. Distribute the containers evenly throughout the oven compartment to allow air circulation between the containers.

Note:

- Never overload the grids
- Special diets where small containers are used should be placed in the bottom oven keeping the containers close together.



| TT ST 4 | t . high |
|---------|----------|
| PT 1000 | 180 ಿ |



b) Adjusting your dual oven sections

- 1. Position the divider on one of the three middle shelves depending on the quantity of dense and delicate products i.e. oven split 60-40%, 50-50% or 40-60%
- 2. Adjust the deflector lever according to the position of the divider.

22. FOLD DOWN TRAY RAIL (OPTION)

- 1. Lift the tray rail from the lower section (do not use the cut-out section) to its horizontal position and ensure that it safely drops into its retaining slots.
- 2. To lower the tray rail, use the central cut out to lift it and release it from its retaining slots. Accompany it down to its resting position

23. DOLLY FOR TRANSFER MODULE (OPTION)

The Multigen can be configured to work with a Dolly to transport the transfer modules (racks) from the kitchen to the Multigen. To dock the Dolly to the Multigen proceed as follows

- 1. Open the Multigen doors
- 2. Dock the Dolly
- 3. With the Dolly, approach the Multigen from the control panel side, at a slight angle.
- 4. Locate the pin on the front left corner of the Dolly to the docking bracket located under the trolley, approximately in the centre of the cold chamber.
- 5. Once the pin locates, swing the rest of the Dolly towards the oven chamber until the oven side bracket engages onto the Dolly.
- 6. Slide the transfer rack catch to its resting position (top of chamber).
- 7. Pull the rack out until it safely engages with the Dolly foot pedal catch.
- 8. Remove Dolly

Note:

- > When inserting the transfer rack into the Multigen, ensure that the transfer rack catch is engaged
- > The 2 compartment Dolly is applicable to all models in the Multigen series

24. PLATE WARMER (OPTION FOR M MODEL ONLY)

The plate warmer option allows for plates to be heated prior to service.

Note:

> Ensure sufficient time is allowed to pre-heat the plates to the required temperature.

▲ Caution:

Please take care when removing plates from the plate warmer compartment, as the bottom shelf is hot. Wear protective equipment to avoid burns.

25. CLEANING

The Trolley should be regularly cleaned and sanitised both inside and out. This will ensure continued and safe food regeneration and ensure longevity of the Trolley.

a) General remarks

- > All external surfaces should be cleaned after every use with a damp cloth
- Internal surfaces with hard-to-remove deposits of dirt should be cleaned with a solution of water and soap applied with a cloth
- Do not use abrasive pads
- > The Trolley should be left to dry for as long as necessary after cleaning

✓ Warning:

Before commencing any cleaning of the Trolley, ensure that it is disconnected from the mains power supply, that the fans have stopped and that it has cooled down. If there is any spillage or ingress of water into the electrical components (e.g. the power supply plug) under no circumstances should the trolley be used until it is completely dry and an authorised electrician has checked and passed it safe to use.

▲ Caution:

- When cleaning the hot top and surrounding frame, use a soft cloth with a pH-neutral detergent (i.e. with a pH value of between 6 and 8).
- > Under no circumstances should the trolley be hosed clean

26. Towing

The Multigen and Dolly can be fitted with an optional fold-down tow bar.

Coupling

- 1. Release the brakes on the castors.
- 2. Align the fold-down tow bar with the towing pin
- 3. Lower and locate the tow bar onto the towing pin
- 4. Secure the safety pin

Uncoupling

- 1. Remove the safety pin
- 2. Lower the towing bar and disengage it from the towing pin
- 3. Lift the bar to its vertical position
- 4. Apply the brakes

Note:

- > Check the folding tray rail is in the down position
- > Ensure all doors are closed correctly and the power cable is stored
- > Check that all items not secured are removed from the Multigen

▲ Caution:

- > Do not tow more than 2 Multigens at any time.
- > Do not tow more than 4 Dollys at any time.
- Do not exceed a maximum speed of 4km / 2.5 miles per hour. Reduce speed when negotiating corners and inclines.
- > Do not couple or un-couple the Trolley on a sloped or uneven floor.
- > The towing arm is spring loaded take care to accompany it up or down.
- > Trolleys should not be towed outside or on uneven surfaces.

27. Error Codes

In case of an error code on the display, see below table for explanation and action to take. If an error code prevents the operation of the trolley, it is accompanied by an audible alarm.

| Code | Explanation | Possible Cause | Action |
|------------|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| | Display is illuminated but control panel not responding | Password parameter set to "Y" | Use the BSmartWise card to unlock the control panel |
| HI | Fault on the chilled side probe. | Probe failure, loose connection or temperature has exceeded the safety limit of 190°C / 374°F. | Request Technical Assistance |
| H2 & H3 | Auto shut down of all functions | Oven probe failure, loose connection or oven temperature has exceeded the safety limit of 190°C / 374°F. | Request Technical Assistance |
| L2 & L3 | Oven set temperature has not been achieved during the cycle | Program set incorrectly | Refer to Programming chapter to reprogram the trolley to the correctly |

| RESET | Auto shut down trolley in safe mode | Electrical disturbances through power supply or CPU unit faulty. | Press touch pad 3: this will reset the Trolley and will enter in programming mode (see chapter "Programming a New Machine and From a 'Reset'). If this does not work, request technical assistance |
|-------|----------------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SC1 | Cycle will not start | Above set temperature in cold section | Wait until cold side temperature reaches SC1 set threshold |
| Ś | BCardWise data not recognized | BCardWise is empty or contains programming data of a different trolley | Reprogram the BCardWise with BWise software using a Multigen parameter list |

28. TECHNICAL

Technical work should only be carried out by authorized and qualified personnel.

Burlodge expressly disclaims all responsibility for problems arising from modifications that have been undertaken by unauthorised technicians, or without the consent of the manufacturer. Burlodge further disclaims responsibility for any malfunctions resulting from the fitting of non-original spare parts.

Non-authorised changes to, or modifications of, the original design and operating features of the Burlodge System could lead to the violation of safety, health and/or environmental regulations, which in turn could result in the voiding of the Certification of Conformity granted in respect of various component parts of the Trolley.

a) Technical Data

Multigen XS/S

| Shipping D 880 x 750 x 34.6" x 29.3 | imensions : 1500 h mm 5" x 59" h | Refrigeran (CFC Free R134a GWP=1430 | t Gas) | ras Shipping Actual W Weight 145 kg/3 160 kg / 353lbs | | l Weight* /320lbs | Sound Pres. Lev. 55 dBA | The (ISC UDO ULAT | r mal Transmit.) 6949) _{DR} = 1,22W/m ² K _{SIDE} =0,98W/m ² K | | |
|------------------------------------------------|-----------------------------------------------|----------------------------------------------|-----------------------------------|----------------------------------------------------------------|-----------------------------------|-----------------------------|-------------------------------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------|
| Dimension 1019 x 668 40.1" x 26.3 | s Dolly x 932 h mm 3" x 35" h | | | Shippin Weigh Dolly 35kg/7 | n g H 71bs | Actual Dolly 23kg/5 | Weight | | | | |
| Code | Model | GN 1/1 capacity (hot-cold) | Tray pito cold) | ch (hot- | Rated voltag | e | Rated power | Maximum rated current | Heat output | Av. cycle consumption**** | |
| BLM51.120 | | | 4 le | evels | 220 50Hz | 0-240V 21P/N/E | 3.1 kW** | 12.9 Amps | | 2.7 kW | |
| BLM51.320 | Multigen XS | 4 levels (hot) 2 or 3 levels (cold) | 77mm/3" 3 levels 57 mm/2.2" | 3 lev 57 mr | 77mm/3" 3 levels 57 mm/2.2" | 380 50Hz |)-400V 2 3P/N/E | 4 kW*** | 7Amps | 1 5 1/14 | 3.1 kW |
| BLM51.720 | | | 2 le 86mr | 2 levels 86mm/3.4" | | V 60Hz P/N/E | 3.3kW | 14 Amps | 1.5 KW | 2.7 kW | |
| BLM50.120 | Multigen S | 7 or 8 levels | 8 le 71.5 7 le | evels 5 mm evels | 220 50Hz | 0-240V 2 1P/N/E | 3.1 kW** | 12.9 Amps | | 2.7 kW | |

| BLM50.320 | 82 mm/3.2" | 380-400V 50Hz 3P/N/E | 7.5 kW*** | 10 Amps | | 3.1 kW | |
|--------------------------------------------------|------------|-------------------------|-----------|---------|--|--------|--|
| BLM50.720 | | 208V 60Hz 3P/N/E | 5.5kW | 16 Amps | | | |
| * Weight includes gantry, racks and cold section | | | | | | | |

UK13 Amps plug BS1363/A – also available with single phase, 16A supply * Can function with a single phase (220-240V/13A UK plug or 220-240V/16A EU market) cord set **** Cook-Chill regeneration cycle of 50 minutes

Multigen M

| Shipping Dimension 1280 x 750 h mm / 50 29.5" x 63 | ns) x 1600).4" x " h | Refrigerant Gas (CFC Free) R134a GWP=1430 | Shipping Weight 193 kg 425.5lbs | Actual Weight* 170 kg 374.8lbs | | Sound Pres. Lev. 55 dBA | Thermal (ISO 694 U _{DOOR} = U _{LAT-SIDE} = | 1 Transmit. 19) 1,22W/m²K :0,98W/m²K | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------|---------------------------------------------|----------------|-----------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------|--------|-----------------------------------|--|-----------------------------------|--|-----------------------------------|--|-----------------------------------|--|-----------------------------------|--|-----------------------------------|--|-----------------------------------|--|-----------------------------------|--|-----------------------------------|--|-----------------------------------|--|-----------------------------------|--|-----------------------------------|--|-----------------------------------|--|--|--|--|
| Dimensio 1019 x 668 40.1" x 26 | ns Dolly 3 x 890 h m .3" x 35" h | m | Shipping Weight Dolly 35kg/77lbs | Actual Weight Dolly 23kg/511bs | | Actual Weight Dolly 23kg/51lbs | | Actual Weight Dolly 23kg/51lbs | | Actual Weight Dolly 23kg/51lbs | | Actual Weight Dolly 23kg/51lbs | | Actual Weight Dolly 23kg/51lbs | | Actual Weight Dolly 23kg/511bs | | Actual Weight Dolly 23kg/511bs | | Actual Weight Dolly 23kg/511bs | | Actual Weight Dolly 23kg/51lbs | | Actual Weight Dolly 23kg/511bs | | | | |
| Code | Model | GN 1/1 capacity (hot-cold) | Tray pitch (mm) | Rated voltage | Rated power | Maximum rated current | Heat output | Av. cycle consumption**** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Multigen M | 8 or 7 levels | | | | | | 2.7 kW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BLM52.120 | Plate warmer | 8 or 7 levels (oven) 4 levels (fridge) | 8 levels = 71.5 7 levels = 82 4 levels = 70 | 220-240V 50Hz 1P/N/E | 3.1kW** | 12.9 Amps** | | 2.9 kW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Multigen M | 8 or 7 levels | 4 10 0015 - 70 | 380,4001/ 50117 | 380-400V 50Hz | 75 | | 1.5 kW | 3.1 kW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BLM52.320 | Plate warmer | 8 or 7 levels (oven) 4 levels (fridge) | | 3P/N/E | kW*** | 12 Amps | | 3.3 kW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BLM52.720 | Multigen M | 7 levels | 82mm/3.2" | 208V 60Hz 3P/N/E | 5.5 kW | 16 Amps | | 2.7 kW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| * Weight in **UK13 Am *** Can fun **** Cook-C | K and cold section * Weight includes gantry, racks and cold section **UK13 Amps plug B\$1363/A – also available with single phase, 16A supply *** Can function with a single phase (220-240V/13A UK plug or 220-240V/16A EU market) cord set **** Cook-Chill regeneration cycle of 50 minutes | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Multigen L |
|------------|
|------------|

| Shipping Dimensions 1510 x 750 x 1600 h mm / 59.4" x 29.5" x 63" h | Refrigerant Gas (CFC Free) R134a GWP=1430 | Shipping Weight 230 kg 507.11bs | Actual Weight* 200kg 440.9lbs | Sound Pres. Lev. 55 dBA | Thermal Transmit. (ISO 6949) U _{DOOR} = 1,22W/m ² K U _{LAT-SIDE} =0,98W/m ² K |
|------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------|----------------------------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Dimensions Dolly 1019 x 668 x 890 h mm 40.1" x 26.3" x 35" h | | Shipping Weight Dolly 35kg/77lbs | Actual Weight Dolly 23kg/511bs | | |

| Code | Model | GN 1/1 capacity (hot-cold) | Tray piłch (mm) | Rated voltage | Rated power (2 supplies) | Maximum rated current (2 supplies) | Heat output | Av. cycle consumption**** |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------------------------|----------------------------------|-------------------------|--------------------------------|------------------------------------------|----------------|------------------------------|
| BLM53.120 | | | | 220-240V 50Hz 1P/N/E | 2 x 2.6 kW** | 2 x 11 Amps** | | 2.7 kW |
| BLM53.320 | Multigen L | 2 x 8 or 7 levels | 8 levels = 71.5 7 levels = 82 | 380-400V 50Hz 3P/N/E | 2 x 7.6 kW*** | 2 x12.5 Amps | 1.5 kW | 3.1 kW |
| BLM53.720 | | 2 x 7 levels | 82mm/3.2" | 208V 60Hz 3P/N/E | 2 x 5.5 kW | 2 x 16 Amps | | 2.7 kW |
| *Weight includes gantry and racks **UK13 Amps plug BS1363/A *** Can function with a single phase (220-240V/13A UK plug or 220-240V/16A EU market) cord set | | | | | | | | |

**** Cook-Chill regeneration cycle of 50 minutes

b) Electrical Connections

The electrical installation must conform to the National and local Electrical Codes.

EUROPE

380-400V 3P+N+E 50Hz/60Hz

Phase R (L1): Brown Phase S (L2): Black Phase T (L3): Grey Neutral N : Blue Earth E : Yellow/Green

Plug fitted is a 16 amp 400V, 3P+N+E plug (BS4343 - EN60309-2) (unless otherwise specified in customer purchase order)

220-240V 1P+N+E 50/60Hz

Phase L1 : Brown Neutral N : Blue Earth E : Yellow/Green

Plug fitted is a 13 amp 230V 1P+N++E plug (BS1363 - EN60950-1) or a 16 amp 230V 1P+N+E plug (EN60309-2) (unless otherwise specified in customer purchase order)

NORTH AMERICA

208 3PH+N+E 60Hz

PhaseX (L1): OrangePhaseY (L2): BlackPhaseZ (L3): RedNeutralN : WhiteEarthE/G : Green



Plug fitted is a 208V-3 PH+N+G 20A NEMA L21-20P type HBL 2511 (unless otherwise specified in customer purchase order)

This plug has a water protection class IPX0

Warning

If trolley supplied with detachable cord set, it should only be replaced with manufacturer's cord set. Replacement with any other cord set may cause risk of electric shock

c) Fault finding

Fault finding should only be carried out by authorized and qualified personnel. The wiring diagram is located inside the technical compartment.

| Problem | Explanation | Possible Cause | Action |
|----------------------|------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| | No power to the trolley | Power supply failure | Check the power supply is ON. Check connections in the plug. Check power supply cable for any damage. |
| | No power to the trolley | Line fuse blown | Find and rectify cause for the failure then replace the line fuse |
| Control panel not ON | No supply from the transformer | Transformer safety fuse blown | Find and rectify cause for the failure then replace transformer safety fuse |
| | Internal oven high limit thermostat tripped | Temperature in the oven chamber has exceeded 215°C / 419°F | Find and rectify cause of oven temperature, then reset the oven high limit thermostat |
| | Internal motor safety switch has tripped | Motor overheated | Find and rectify cause for the failure. The thermostat will automatically reset when the temperature of the motor cools down |

Before placing a service call ensure that power is to the Trolley is available:

d) Condenser cleaning

The condenser is a part of the refrigeration unit. It is housed in one of the technical compartments on the back side of the Trolley.

In order to clean the condenser, proceed as follows:

- 1. Disconnect the Trolley from the mains and ensure that it is safe to work on.
- 2. Remove the ABS panel to access the electrical compartment.
- 3. Unplug the fan using the quick disconnect connector
- 4. Remove the fan assembly by unscrewing the 2 screws at the front and 2 screws at the back
- 5. Remove accumulations of dirt with a vacuum cleaner (if necessary with a wet/dry version).
- 6. Refit the fan assembly and reconnect the power to the fan
- 7. Replace the ABS panel

Note:

- > Ensure that the fan assembly is refitted correctly and is tight to avoid any air gaps
- > The condenser should be checked and cleaned on a regular basis
- > Do not bend the condenser-fins out of shape during cleaning. If necessary, straighten the fins with a fin evaporator comb

e) Service calls

Before you contact the Burlodge Service Department or Authorised Service Agent, please make sure that a competent electrician has carried out the following checks:

- 1. Check the power supply.
- 2. Check the power cable, plug and internal fuses.
- 3. Check for any visual damage.

✓ Warning:

Under no circumstances should you remove or interfere with any part of the Trolley even if it is disconnected from the power supply. If the trolley still does not operate, contact your local service agent or Burlodge Service Department.

Please ensure that you give the following information when placing a call with the Service Department (refer to the rating plate at the rear of the trolley):

- Product name
- Model code
- Date of manufacture
- Serial number

| burlodge Via Ca' Bertoncina,43 - Seriate(BG) - Italy | MULTIGEN M BLM52.320.0001 |
|---------------------------------------------------------------------|------------------------------|
| Date <mark>: 28/01/2020</mark> Serial n./N. de Serie: BLC 153827 | Made in EU IPX4 |
| Supply: 380-400V 3N~ 220-240 | 0V~ 50/60Hz |
| Amps: 12A 12A Watts: 7800W 2700W | Clim Class: N |
| Gas: R134a Design gas Qty: (12,35o | z) 0,35 kg |
| CE 🕱 | |

- The location of the equipment.
- A detailed description of the problem.
- Your name, department, position and phone number.

f) Spare parts

Use only original Burlodge spare parts, they are an exact replacement. Use of other spare parts may compromise the safety and performance of the trolley. Burlodge, or its authorised service agents, must carry out any repairs during the period of warranty. Failure to comply with these requirements may invalidate the warranty and all certifications of the trolley. When ordering spare parts or requesting technical assistance, always refer to the data plate to identify the trolley.

g) Warranty

The standard warranty is one-year parts and labor or as per contract. Commencing 14 months from the date of delivery or 12 months from the date of commissioning, whichever expires first.

All equipment except china, trays and consumable components is covered against faulty material or workmanship. In the unlikely event of any valid failures, Burlodge or its authorised agents will repair the trolley free of any charges.

The following will not be covered by the warranty and may invalidate it:

- > Damage during unloading or storage
- > Incorrect installation
- > Neglect or misuse of the equipment
- > Use of the trolley other than described in this manual
- > Fire, water or frost damage
- > Using parts not supplied by Burlodge/Authorized Service Agent
- > Service carried out by service companies not authorized by Burlodge
- False calls
- \succ Voltage fluctuations exceeding ± 10 % of the nominal voltage
- > Fuse replacement
- > Power failure
- > Damaged power cord or plug
- Re-programming after commissioning and after initial training will not be covered by the warranty
- > Use in an ambient temperature greater than 30°C / 86°F

Only authorised persons may carry out repairs during the warranty period or in compliance with the Burlodge contract. Should the Customer fail to comply with these requirements, both the initial warranty period of the trolley will automatically become invalid.

This manual is provided to assist you in resolving some of the problems you may incur. Please make sure that you refer to this manual before placing a service call as we reserve the right to charge for any calls that could have been resolved by reading this manual.

h) Preventative Maintenance

Correct preventative maintenance is essential to ensure the reliable and safe operation of the trolley and to ensure the longest economical lifespan of the equipment. All equipment should be serviced at six monthly intervals. Only competent and fully trained personnel may carry out servicing to the manufacturer's specifications.

Burlodge offers a wide range of service contracts covering this equipment provided such equipment is operated and maintained in accordance with the manufacturer's recommendations. You will have the peace of mind that comes with having a fully trained service force able to support this product anywhere it is located through preventive maintenance contracts and after sales service.

For further information and for specialized contracts, please contact the Burlodge Technical Department.

i) End-of-life disposal and recycling

It is the responsibility of the user to ensure that local laws and regulations are complied with when dismantling the product and disposing of the trolley. All fluorinated greenhouse gases contained in the equipment (excluding those contained in foams) shall be recovered. The recovery of these gases shall be as provided for in the Regulation 517/2014/EU.



Whenever possible, we will arrange for the appropriate recycling / disposal of Multigen units that have reached the end of their useful working lives. Contact us for further information.

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