VARIO-THERM

User instructions.

Meal Delivery System

F1H, F1V, F2HH, F2HR, F2VR, F2HRP

Read these instructions before use

DATE PURCHASED:

MODEL NUMBER:

SERIAL NUMBER:

DEALER:

SERVICE PROVIDER:

Dear Customer

Thank you for choosing Falcon Foodservice Equipment.

This manual can be downloaded from *www.falconfoodservice.com* or scan here:

IMPORTANT: Please keep this manual for future reference.

Falcon Foodservice Equipment
HEAD OFFICE
Wallace View, Hillfoots Road, Stirling. FK9 5PY. Scotland.
Phone: 01786 455200

WEEE Directive Registration No. WEEE/DC0059TT/PRO

At end of appliance life, dispose of appliance and any replacement parts in a safe manner, via a licensed waste handler. Appliances are designed to be dismantled easily and recycling of all material is encouraged whenever practicable.

- **This appliance may be discoloured due to testing.**

- **These instructions are only valid if the country code appears on the appliance. If the code does not appear on the appliance, refer to the technical instructions for adapting the appliance to the conditions for use in that country.**

- **Installation must meet national or local regulations. Attention must be paid to safety (installation & use) regulations, health and safety at work act, local and national building regulations, fire precautions act.**

- **To prevent shocks, this appliance must be earthed.**

- **Do not flash test, this appliance is unsuitable for the insulation resistance or flash test section of the portable appliance test (PAT).**

- **This appliance should only be plugged into a type A rated R.C.D. socket.**

- **This appliance has been UKCA/CE marked based on compliance with the relevant Electrical and Electromagnetic Compatibility (EMC) Regulations/Directives for the voltages stated on the data plate**

- **This equipment must only be used by trained and competent persons.**

- **The responsible person(s) must instruct the operators of the correct operation and maintenance of the appliance.**

- **Unless otherwise stated, parts which have been protected by the manufacturer must not be adjusted.**

- **To obtain maximum performance from this unit regular servicing of the appliance should be undertaken to ensure correct operation, it is functioning as intended, and safe to use. We recommend servicing in accordance with SFG20 Maintenance Schedules and as a minimum, after 2,500 hours of use, or annually, whichever comes first and that a maintenance contract be arranged with an appointed service contact. Visits may then be made at agreed intervals to carry out adjustments and repairs.**

- **Check that no damage has occurred to the appliance or supply cord during transit. If damage has occurred, do not use this appliance.**

- **Ensure the supply cord is routed free from the appliance to avoid damage.**

- **If the supply cord is damaged it must be replaced by the manufacturer, its service agent, or similarly qualified persons to avoid hazard.**

- **Always unplug the supply cord before attempting to move the appliance.**

- **This appliance is for indoor use only.**

- **The appliance and its accessible parts become hot during use. Care should be taken to avoid touching heating elements. Children less than 8 years of age shall be kept away unless continuously supervised.**

- **No recommendations in this document override the risk assessments or policies of the establishment where the appliance is in use.**

- **Maximum load per shelf. 5 kg (maximum of 40kg per rack)**

Training and competence

To help ensure the safe use of this appliance there is a requirement for you to provide whatever information, instruction, training, and supervision as is necessary to ensure, so far as is reasonably practicable, the health and safety of all users.

For further help and information on training and competence we would refer you to the Health and Safety Executive website; www.hse.gov.uk document ref: health and safety training INDG345. International customers should default to the health and safety guidelines provided by your government body.

Risk assessment

As part of managing the health and safety of your business you must control any risks identified in your commercial kitchen. To do this you need to think about what might cause harm to people and decide whether you are taking reasonable steps to prevent that harm. This is known as risk assessment. It is important to consider the environment around the product as well as the product itself. For example, oil or food spills will present a significant risk so users so the need to immediately clean up such spills must be reflected in staff training.

For further help and information on risk assessments we would refer you to you the Health and Safety Executive website; www.hse.gov.uk document ref: risk assessment INDG163. International customers should default to the health and safety guidelines provided by your government body.

Electrical Safety and Advice Regarding Supplementary Electrical Protection

Commercial 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 power supply suitable for the load as stipulated by the appliance data label.

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

We recommend: -

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

Your attention is drawn to:-
BS 7671:2018–Guidance Note 8 - 8.13 : Other locations of increased risk

It is recognized that there may be locations of increased risk of electric shock other than those specifically addressed in Part 7 of BS 7671. Examples of such locations could include laundries where there are washing and drying machines in close proximity and water is present, and commercial kitchens with stainless steel units, where once again, water is present.

Where because of the perception of additional risks being likely, the installation designer decides that an installation or location warrants further protective measures, the options available include:

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

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

Contents

1.0 **APPLIANCE INFORMATION**

A - Serial No

B - Model No

C – Refrigerant Gas

D – CO2 Equivalent

E – Gas Weight

F – Global Warming Potential

G - Electrical Rating

H - Total Electrical Power

I - Electrical Phase Loading

J – LoRa Frequency

K – WiFi Frequency

1.1 DIMENSIONS / CONNECTION LOCATIONS

F1H
F1V

F2HR
F2VR

F2HH

F2HRP

A = ELECTRICAL INLET

TRAYSLIDE + END SHELF
SHOWN FOR REF ONLY
(FACTORY FITTED ACCESSORY)
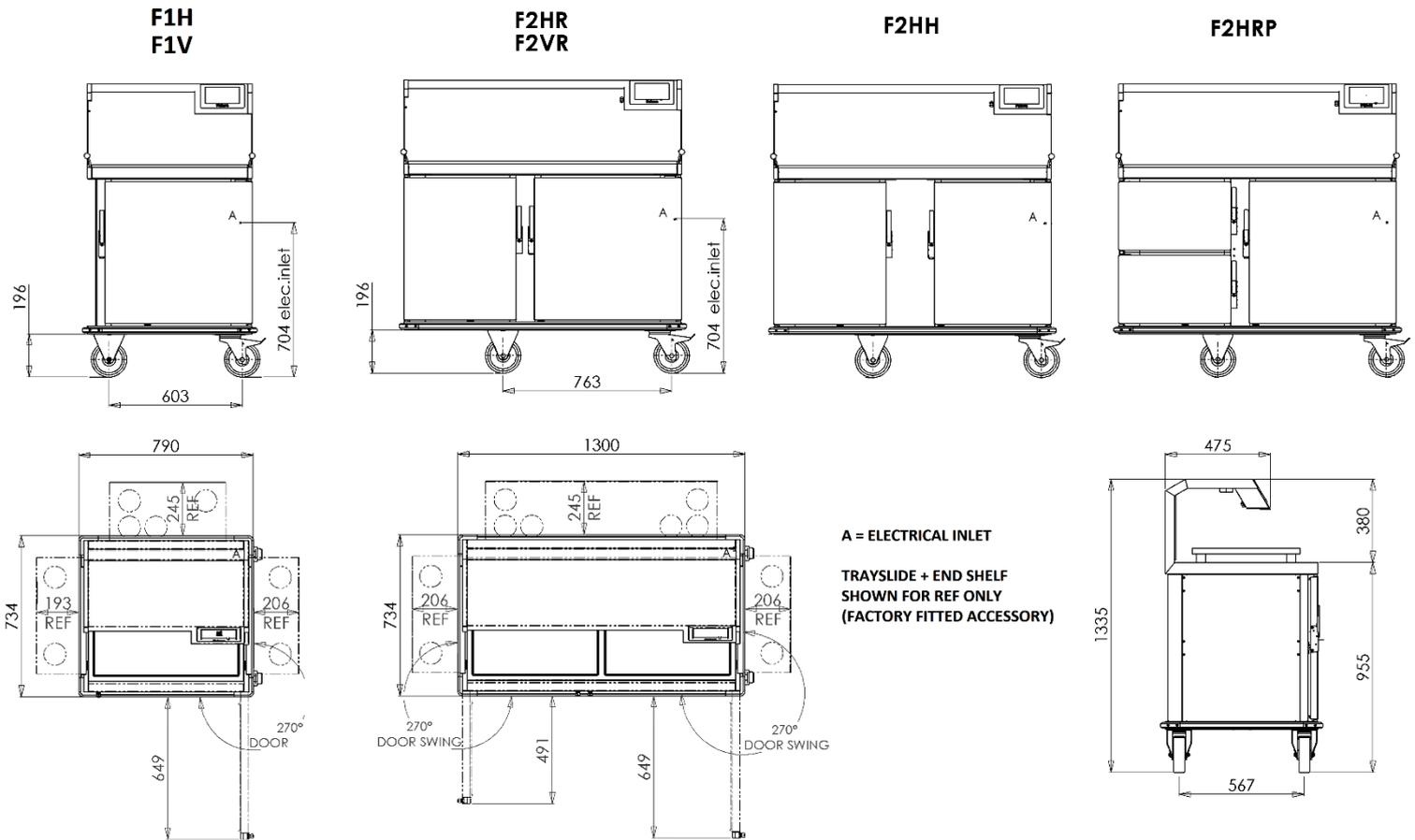
1.2 APPLIANCE WEIGHT TABLE

APPLIANCE	UNIT WEIGHT (kg)	PACKED WEIGHT (kg)
F1H	116	138
F1V	116	138
F2HH	178	203
F2HR	178	203
F2HRP	187	212
F2VR	178	203

2.0 **WHEN PLUGGING IN**

2.1 DUAL SUPPLY & RCD REQUIREMENTS

 Warning: On dual supply models do not plug both supplies into adaptor, extension lead or 1x13amp double socket. Ensure both supplies are separate.
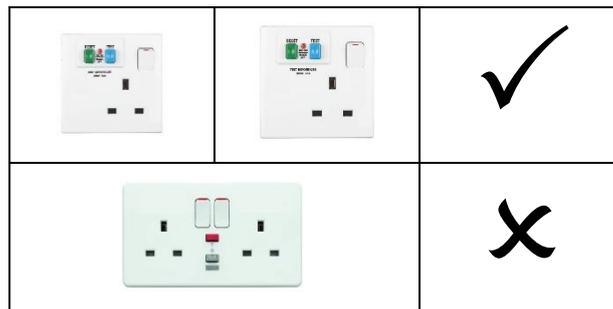
 We recommend supplementary electrical protection with the use of a 30mA residual current device (RCD)

2.2 MANOEUVRING THE TROLLEY

 TAKE CARE WHEN MOVING AN APPLIANCE FITTED WITH CASTORS.

- Check that the Trolley is unplugged before moving, and the cable is stored safely.
- Pushing from the plug side is the preferred method of moving the trolley, pulling the trolley should be kept to a minimum and only when pushing is impractical.
- Proper footwear should be worn.
- Ensure tray slide and side shelves are down.
- Ensure all items on the trolley are well secured within the chambers.
- Due care and attention must be paid during movement to avoid collisions.
- Take care when manoeuvring through doors and into lifts, lock open lift doors if possible.
- Once the destination has been reached, ensure that the trolley is not blocking any gangways, doorways or fire exits Ensure the supply cord will not create a trip hazard. Apply the foot brakes on castors Plug the Trolley in.
- Do not overload appliance.
- Mobile units may build up a static charge, this is not a fault and charge will be discharged when appliance is plugged in.

3.0 **OPERATION**

3.1 COMPONENT PARTS

F1V/F1H	F2HR/F2VR
F2HH	**F2HRP**
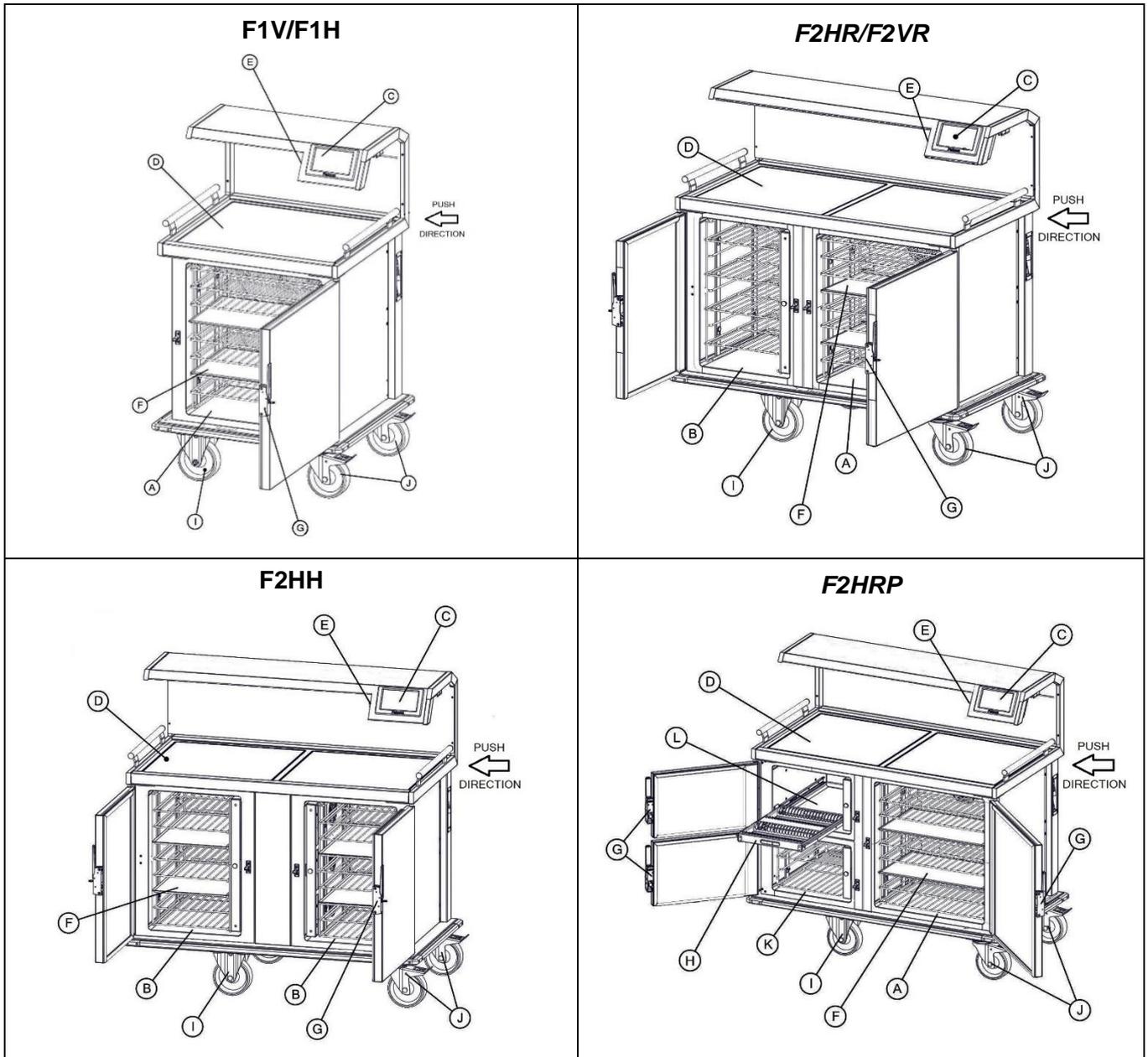
A -	Landscape compartment	G -	Lockable door catch + keys
B -	Portrait compartment	H	Plate rack
C -	Touch screen controller	I -	Fixed wheel Castors
D -	Hotplate worksurface	J-	Swivel braked castors
E -	Food probe	K-	Fridge compartment
F -	Oven divider plate	L	Plate warmer compartment

3.2 STATUS LIGHTS ON GANTRY

Plug the trolley into the supply and switch the socket on. The status of the unit will be illuminated via the LEDs on the gantry. The LED's colour will indicate the status of the trolley (see below table for reference:).

LED Colour:	Status:
Green	Unit Idle
Yellow	Oven Pre-Heating
Magenta	Cook/Boost/Hold
Blue	Chilling
LED Colour:	**User Prompt:**
Yellow Flashing	See fault table
Red Flashing	See fault table
Green Flashing	Food ready

3.3 TOUCHSCREEN START-UP MENU

On start up the touchscreen will have the following display:
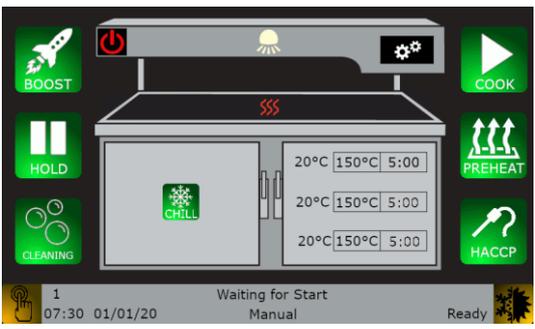
	Note: When selecting desired fuction/operation on controler eg COOK Icon the other options are hidden with exception of HACCP and STOP Icon.

	Boost	Boost's food temperature, configurable in **Manager**
	Hold	Maintains food temperature configurable in **Manager**
	Cleaning	Configurable in **Manager**
	Cook	User or program determined temperature and time
	Preheat	Heat's oven chamber prior to loading food
	HACCP	Defines temperature at acceptable level
	Hotplate	Enables hotplate
	Light	Illumination of countertop area
	Chiller start	Starts chilling, temperature configurable in **Manager**
	Vario-Therm Toggle	Toggles between oven and fridge (Only on F1V and F2VR appliances)
		Message bar operation refer to section 3.15.
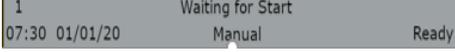
3.4 BOOST

Oven boost option is available if food requires additional cook time at the end of the cook cycle. If produce is below the required HACCP Temperature.

3.4.1   To Activate touch the boost   Icon on the main start-up menu.

Pre-set boost settings are set in the manager menu screen parameters.

3.5 HOLD

The oven can be used to hold food at a required temperature.

3.5.1   Touch the **HOLD** icon to activate.

Pre-set hold settings are in the manager menu screen parameters.

The Main screen will highlight the chamber magenta to show that the oven is holding.

The LEDs on the gantry will change from **Green** to **Magenta**.

This mode will continue for 2 hours or until **STOP** is pressed.

The LED's on the gantry will change to flashing **Green.**

  MESSAGE BAR WILL DISPLAY CURRENT ACTIVITY.

Also note message bar display on screen will display current activity.

3.5.2   Press the **CONFIRM** to clear the message.

3.6 CLEANING & ROUTINE MAINTENANCE

See section 5 for cleaning procedures.

3.7 COOK

3.7.1　　　Go to start up menu on screen, ensure unit is manual mode as shown below (relevant mode circled in yellow on message bar):
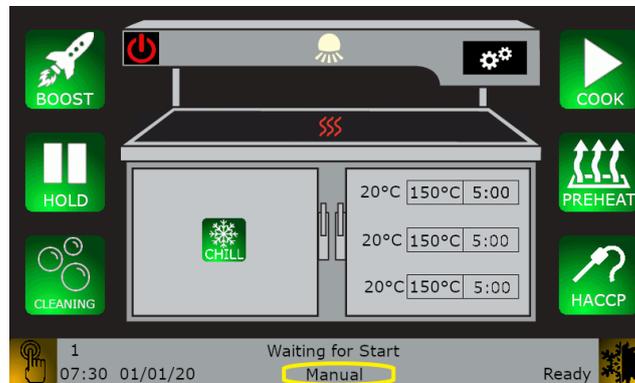
3.7.2　　　Set an oven temperature by touching the top value as circled yellow as below. Please note this will cascade the same temperature onto the other two zones.
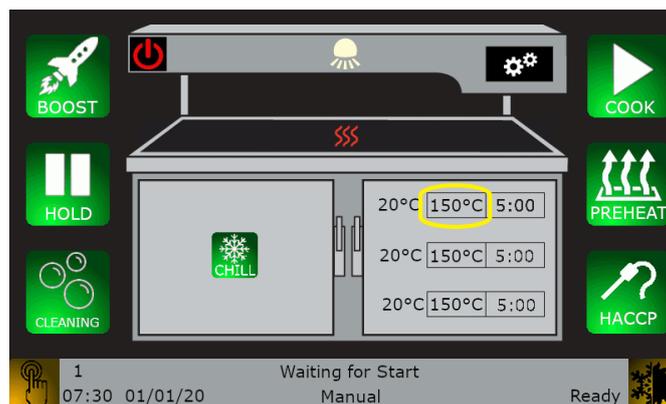
3.7.3　　　To individually control the mid and bottom zone temperature touch the relevant temperature zone and enter relevant temperature and touch <ENT> to confirm. **Note: if any of these temperatures is set 0°C then they will not operate at all during the time set.**

3.7.4　　　Set oven time by touching the top value to the right of the oven temperature and enter the desired time and touch <ENT> to confirm. Please note this will cascade the same time onto the other two zones.

3.7.5　　　Touching the **COOK** icon will heat the oven to the set temperatures. Timer will countdown and message bar will indicate actual food removal in real time.

3.7.6   This mode will continue until the time is met or if **STOP** ![STOP] Icon is touched.

3.7.7   The screen will change to show that the oven is heating. The LED's on the gantry will change from **Green** to **Magenta.**

3.7.1   When the cook cycle is complete. A display on the screen will indicate to the user to remove food and The LED's on the gantry will change to flashing **Green** accompanied by a short buzzing sound to indicate that the timer has finished.

3.7.2   Touch the **CONFIRM** ![✓] to clear the message.

⚠   **MESSAGE BAR WILL DISPLAY CURRENT ACTIVITY.**

3.8 PREHEAT

3.8.1 Go to start up menu on screen, ensure unit is on manual mode as shown below (relevant mode circled in yellow):
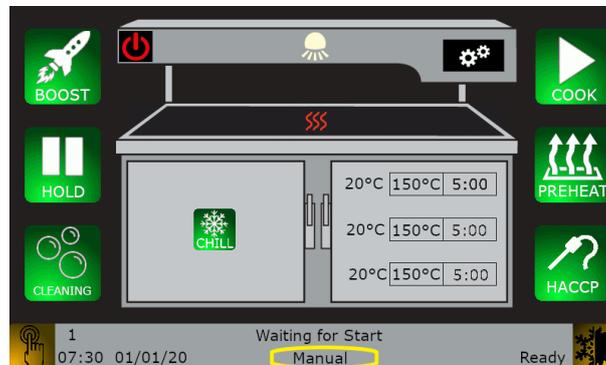
3.8.2 Touching the **PREHEAT** icon will begin to preheat the oven.

Note: If oven already at temperature unit will signal that it is ready. If oven is above the pre-set preheat temperatures gantry LED's will flash indicating to the user, it needs to cool down.
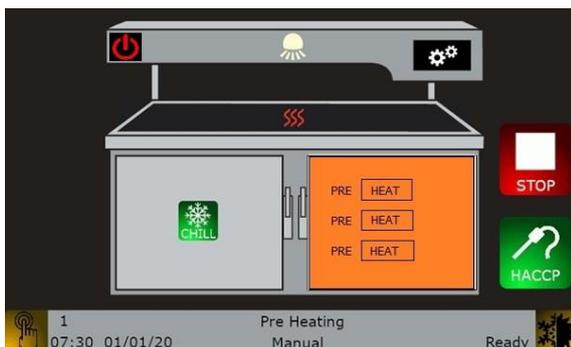
*Shown without temp display

*Shown with temp display.

3.8.3 The screen will change to show that the oven is preheating. The LED's on the gantry will change from **Green** to **Magenta.**

3.8.4 This mode will continue until the Stop Icon is touched or if it completes its cycle.

When the pre-heat cycle is complete. A display on the screen will indicate to the user to load food and The LED's on the gantry will change to flashing **Green** accompanied by a short buzzing sound to indicate that the timer has finished (if buzzer is switched on).

3.8.5 To clear this message open door and load food.

PRE HEAT temperatures can be altered to do this go to the "**MANAGERS MANUAL"** SETTING as per section 4.17.
* Temperature display can be switched on/off if required. See section 4.11.

3.9 HACCP

HACCP system and probe can be used at any time.

Variance food groups and exit have been assigned an Icon, see below icons for reference:

	Soup
	Protein
	Vegetables
	Starch
	Chilled Desert
	Special
	Special
	Hot Desert
	To Exit HACCP

3.9.1   Before process begins, clean the HACCP food probe using sterile wipes, care must be taken as it is sharp.

3.9.2 To Activate touch the HACCP button on the main start-up menu.

3.9.3 Enter your initials onto keypad <ENT> to confirm.

3.9.4 A new screen will appear (as below).

3.9.5   Carefully probe food and observe red value on screen.

3.9.6   The temperature will climb, and the red value will change to green when the pre-set HACCP temperature has been achieved. An audible buzzer will also sound to indicate the Temperature has been reached.

3.9.7   Once the reading is stable touch the relevant icon in relation to the food you are probing to record and lock in.

3.9.8   After the process is complete, clean the HACCP food probe using sterile wipes, care must be taken as it is sharp.

(The HACCP pre-sets are set within the" **MANAGERS HACCP TEMPERATURE"** in Section 4.5)

The data will be logged into the log memory within the trolley which can be downloaded via USB or WIFI, In Addition If you have subscription Connected Kitchen Network dashboard account the data will be sent automatically to the cloud.

To Manually Download the data to a USB Flash Drive, see section 3.18.

3.10 HOTPLATE

3.10.1   Touching the **Hotplate** Icon on the screen will switch on the heating the serving surface.

 HOTPLATE TEMPERATURE CAN BE ADJUSTED SEE "SECTION 4.15 MANAGER-HOTPLATE SETTINGS".

The Main screen will change the hotplate area from **Black** to **Red** to show that the hotplate is heating.

This heat will continue until the hotplate Icon is touched again.

Hotplate can also be set to come on at a desired time, this is dependent on power sharing requirements. If sufficient power is unavailable hotplate will not heat. This is not a fault. When sufficient power is available the hotplate will heat. See section 4.16 for setup.

 IF THE SURFACE IS CRACKED, SWITCH OFF THE APPLIANCE TO AVOID THE POSSIBILITY OF ELECTRIC SHOCK.

3.11 SWITCH ON/OFF GANTRY LIGHT

3.11.1   To switch on the countertop illumination, touch the light symbol , to switch off, touch again. This can be operated at any stage when unit is active.

3.12 USING THE OVEN QUICK START

3.12.1   Before plugging in:

3.12.2   Check the appliance is free from damage.

3.12.3   Ensure the Trolley is on a flat surface and the brakes have been applied.

3.12.4   Ensure all shelves and dividers are in position.

3.12.5   To turn the appliance on, plug the trolley into a mains supply and carry out the following operation:

3.12.6   Turn on mains power supply on.

The appliance comes with an automatic self-check procedure. When appliance is switched on. It will cycle through the self-check when first attached to mains supply (Once per day). This checks elements, compressor, hotplate, buzzer, and cycles through WRGB LED's on the Gantry to ensure all working within designated parameters.

3.12.7   Check what mode the unit is in; this is displayed on the info bar on the bottom of the screen. (as below text circled in yellow is an example of manual mode), There are two options manual and automatic mode,
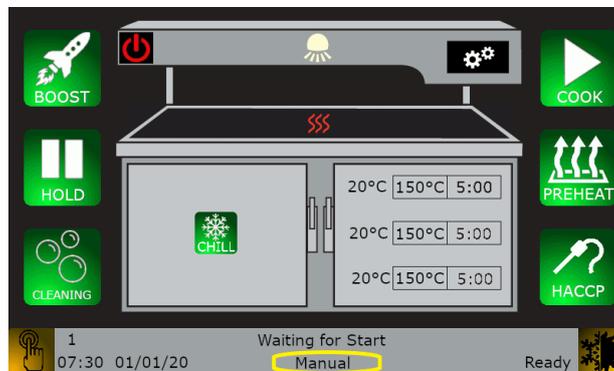
When using manual mode, please ensure the oven has been pre-heated to a sufficient temperature.

3.12.8   See section 4.17 to set Pre-heat temperatures under the **"MANAGERS MANUAL"** Settings.

3.12.9   Activate Pre-Heat See section 3.8.

3.12.10   Once pre-heat is complete to activate Cook see section 3.7.

3.13 SWITCH ON THE FRIDGE AND SET TEMPERATURE

**NOTE: SOME UNITS ARE NOT FITTED WITH CHILLER.
CHECK YOU MODEL NUMBER TO CONFIRM**

3.13.1   Go to start up menu on screen, ensure unit is manual mode as shown below (relevant mode circled in yellow):
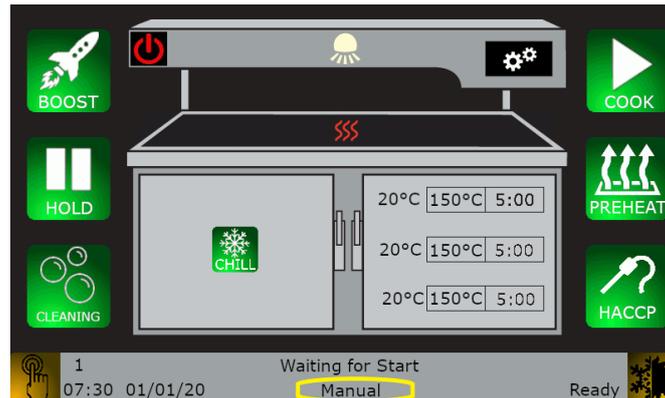
3.13.2   To set the chiller, touch the chill symbol on the screen. This will switch the chiller on and operate at factory settings.

See section 4.3 to set chiller temperature under the **"MANAGERS REFRIGERATION TMP"** Settings.

3.13.3   The current temperature will be displayed.
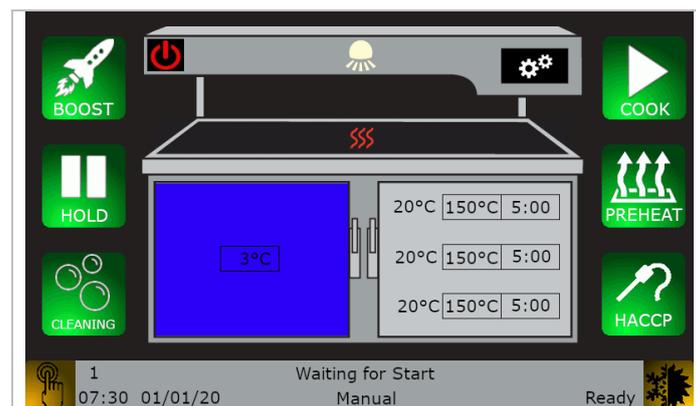
3.13.4   To switch off, touch anywhere on the highlighted blue fridge area to switch off, a message shall appear, confirm to switch off.

3.14 VARIO-THERM MODE: SWITCH OVEN TO FRIDGE

**SOME UNITS ARE NOT FITTED WITH THIS OPTION
CHECK YOU MODEL NUMBER TO CONFIRM.**

Vario Therm option enables a chamber to change an oven to a fridge or vice versa.

3.14.1   If oven on, switch oven off. Touch the stop icon [STOP]. And let the oven cool down.

**NOTE: THE FRIDGE WILL NOT OPERATE UNTIL THE OVEN
TEMPERATURE IS BELOW 30 DEGREES.**

3.14.2   Once the oven is below the required temperature. Touch the vario-icon [icon] on the touch screen (located on lower right-hand corner).
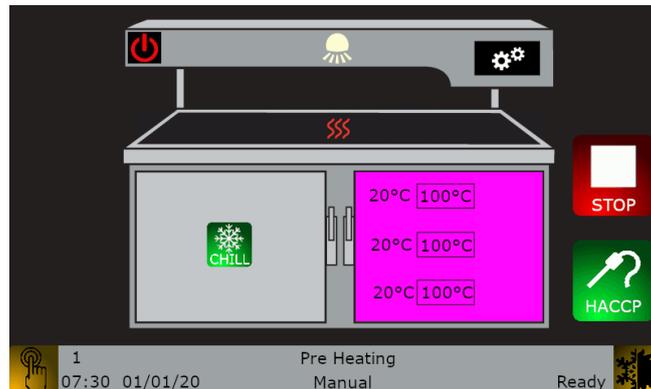
3.14.3   The oven chamber on the screen will change to display the chill symbol. **Note both icons on both chambers will have the same symbol.**

The fridge will engage to the pre-set temperature (This is set in the managers temperature parameter (See Section 4.0 to access).

3.15 TOUCHSCREEN INFORMATION MENU

3.15.1   To access this menu, touch the grey message bar on the bottom of start-up screen to activate.

	Food data	Enters the Food data screen (not enabled on this range)	
	Patient data	Enters the Patient data screen (not enabled on this range)	
	Log	Enters the Log screen (See section 3.16)	
	Hour ran	Enters the Hours ran screen	
	IO Monitor	Enters the IO monitoring screen (See service manual)	
	USB	USB Disabled (no USB detected)	
	USB	*USB Enabled (USB detected)	

* To download log data, see section 3.17.

3.16 LOG

This option logs all the alarms, events and HACCP data recorded by the trolley.

3.16.1   Access the touch screen information menu, by touching the grey message bar on the bottom of start-up screen to activate., The bottom of the screen will change and display a different message bar as shown below:

3.16.2   Touch the log icon to access the logbook.

3.16.3   Use Manager PIN: <2555> to unlock and access. Screen will be displayed as below, if there are any events they will be listed on this screen.
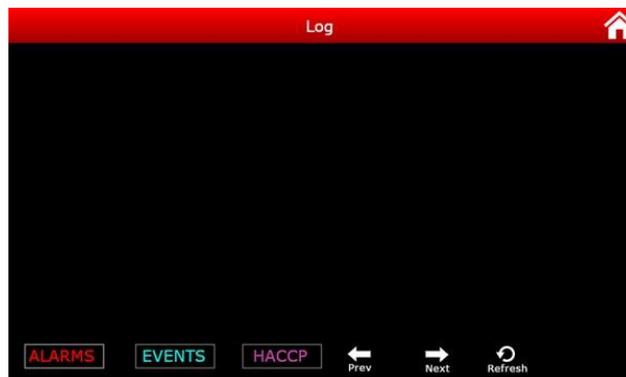
3.16.4   To exit touch the home Icon.

3.17 HOURS IN USE

The counters of operational time are listed here; these may be reset when the trolley is serviced. This information can help build a preventive maintenance policy in line with the recommended SFG20 maintenance schedules.

3.17.1   Access the touch screen information menu, by touching the grey taskbar on the bottom of start-up screen to activate., The bottom of the screen will change and display a different taskbar as shown below:

3.17.2   Touch the hours run Icon to access the logbook.

3.17.3   Use Manager PIN: <2555> to unlock and access. Screen displayed similar to below, Key components run time will be listed.

Hours run		
Service	00226:02	RESET
Mains Powered	00226:02	RESET
Battery Powered	00000:01	RESET
Right Top Htr	00090:32	RESET
Right Mid Htr	00091:01	RESET
Right Bot Htr	00091:03	RESET
Left Top Htr	00000:00	RESET
Left Mid Htr	00000:00	RESET
Left Bot Htr	00000:00	RESET
Compressor	00025:03	RESET
Hotplate	00000:00	RESET

3.17.4   To reset the count, touch the "reset" word on the screen.

3.17.5   To exit touch the home icon.

3.18 USB DOWNLOAD DATA TRANSFER

To download the trolley log data via USB.

3.18.1 Access the touch screen information menu, by touching the grey message bar on the bottom of start-up screen to activate., The bottom of the screen will change and display a different message bar as shown below:

3.18.2 Plug the USB flash drive into back of control panel case. The greyed-out USB Icon will change to white to indicate the USB has been detected.

3.18.3 Touch the USB icon to access the USB options screen as below.

3.18.4 Touch the write log icon.

3.18.5 Use Manager PIN <2555> to transfer.

3.18.6 A message shall appear "Please wait USB operation" this will be followed by a completed message. The Data will now be on the USB Flash drive.

3.18.7 To exit the trolley, touch the home icon (see next page on how to read data).

3.18.8 Ensure the data is available and can be browsed via the PC. It will be a **.txt** file with a filename similar too "Trolley003_04_03_21_09_45" the filename is related to the name of the trolley and the date and time of download.

3.18.9   To read this file the user can download a file from the Falcon Website which will organise and filter the data as desired. (See below QR Code for download).

3.18.10   Open excel spreadsheet, and load Falcon downloaded file

Note this is an xlsx file so for older versions of Excel (prior to Excel 2007) will not work.

3.18.11   Click the select file button and browse for the trolley **.txt** file and open file (as below).
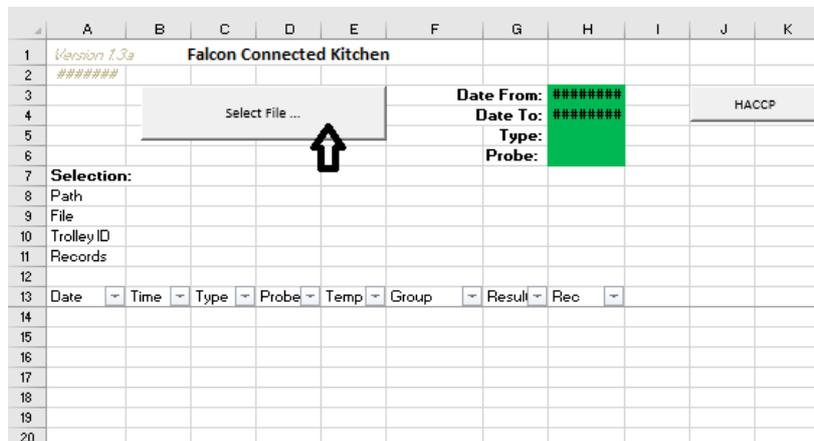
There will be a slight delay whilst the file is read and imported into Excel, this delay is dependent on the amount of data in the download file and the PC speed.
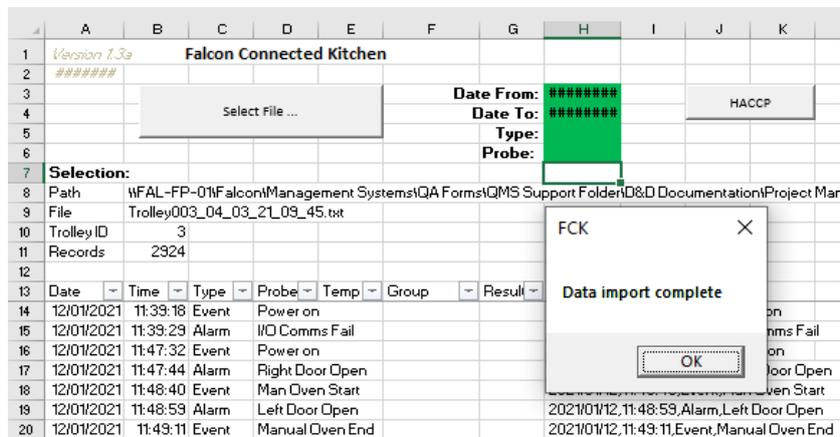
3.18.12   Once the import is complete click OK at the Data import complete prompt.

Imported information is displayed, also displayed is the file path used, the file name, the trolley ID and the number of records imported.

The data is automatically filtered allowing further manipulation as required.

3.18.13   To produce the HACCP report, enter a from and to dates in cells H3 and H4 respectively, then click the HACCP button. The dates entered are validated (note by default the maximum date range is 1 week / 7 days, but this is software controlled and can be amended if required) before producing a HACCP report.

This is automatically created in Print Preview mode for easy printing (to hardcopy or PDF). This data is also updated onto the HACCP tab.

3.19 WIFI DOWNLOAD DATA TRANSFER

THIS IS A FACTORY FITTED ACCESSORY (MUST BE ORDERED AT TIME OF ORDER). SEE INSTALL AND SERVICE MANUAL FOR COMMISSIONING

To enable wireless transfer of data there is some setup required see section using wifi download data transfer.

The software enables trolley log data (HACCP) to be read from a PC. This is an alternative to USB Download and provides remote access.

3.19.1   Download PC030 (name to be updated) software onto your computer.
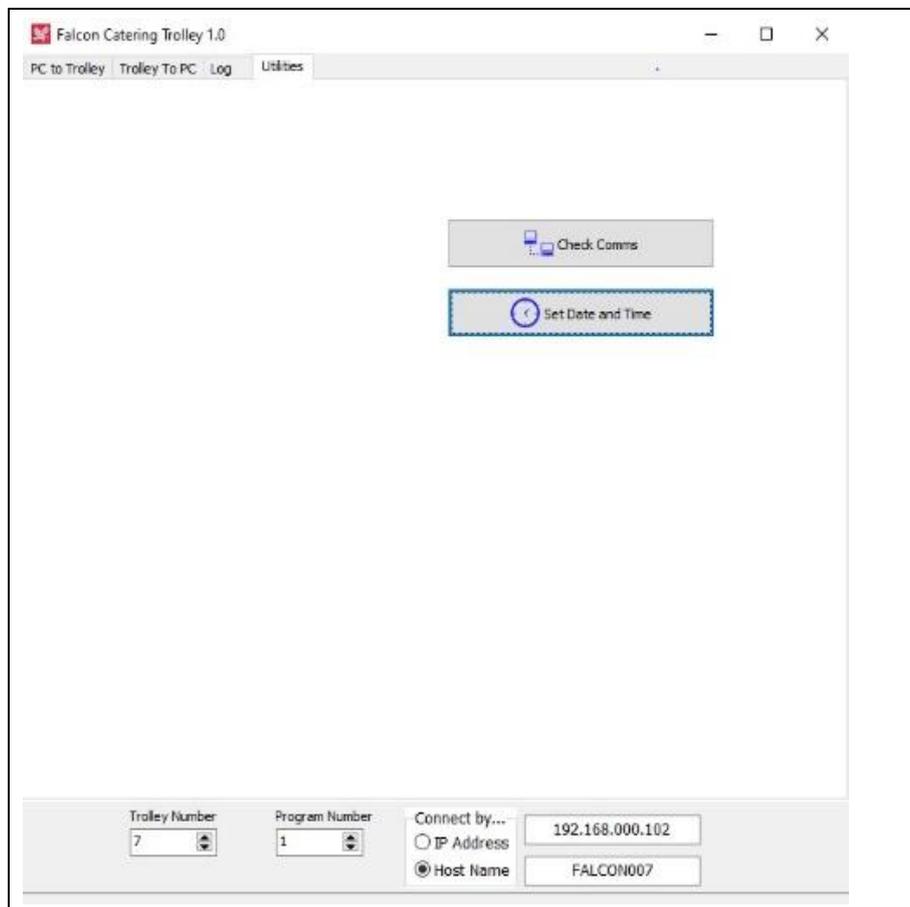
3.19.2   Go to the <utilities>. Tab

3.19.3   Go To Host Name and select Trolley number (see section 4.2 for host name of trolley)

3.19.4   Select <Check Comms>

It will verify communication is okay.

3.19.5   If communication is okay go to "log" Tab
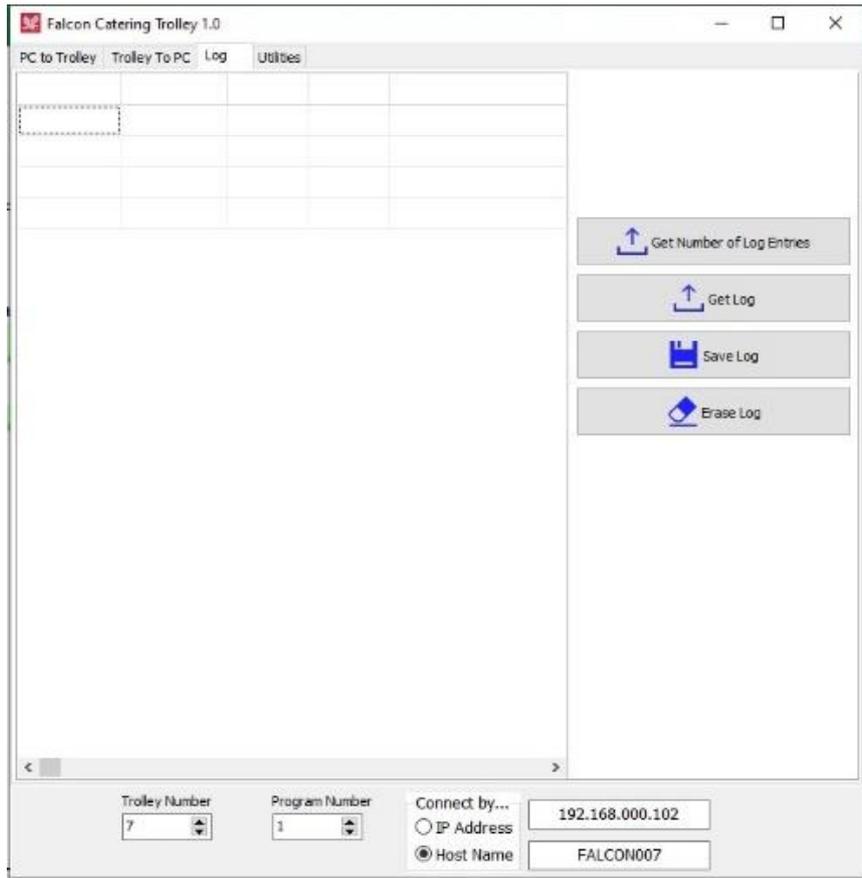
3.19.6   Select "Get Log"

3.19.7   Save CSV file to a relevant working area on either your PC or Network.

The data will be in." CSV" format. Falcon connected trolley report generator is available on request. This report generator will organize and filter the desired data.

3.19.8   Press the "Select" button and then open the relevant file.

3.20 CONNECTED KITCHEN CLOUD DATA TRANSFER

Connected Kitchen is subscription service provided by Koolzone Ltd. This option provides real time data from a Cloud based network. The Trolley is IOT ready and requires some additional steps from Koolzone to enable for example a site survey and LoRaWAN Gateway will be required. Please contact Koolzone Ltd on the below:

Tel: + 44 3300 88 11 36
Email: info@koolzone.com
Website: www.koolzone.com

Koolzone will require the Equipment Unique Identification (E.U.I Number) to setup, this will be located on the trolley as below.

DETAIL A

KOOLZONE
CONNECTED FTX
SKU:KLS-UART-FF-8321
DevID: xxxxxxxxxXXXXXX

E.U.I NUMBER
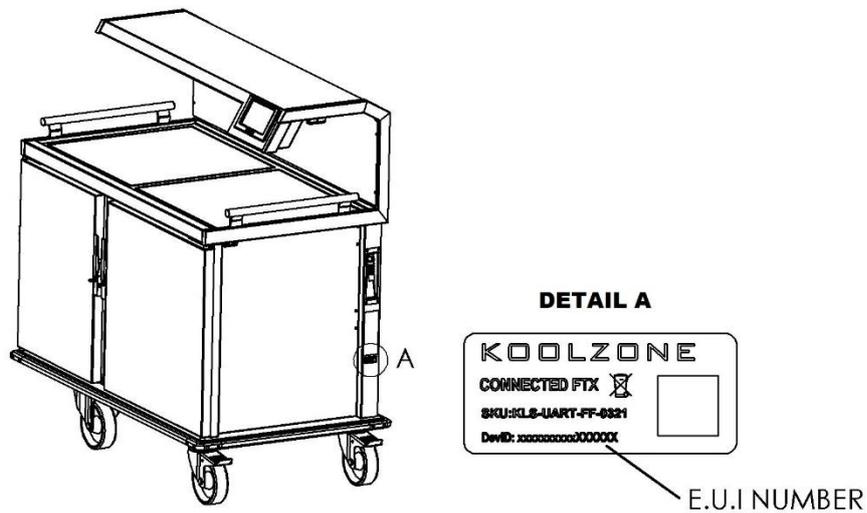
Once LoRaWAN Network has been commissioned and user account setup, a user login and password will be required.

4.0 CONFIGURATION AND AUTO TIMERS

4.1 CONFIGURATION MAIN SCREEN

4.1.1 To Access configuration on main screen, touch the cogs icon ⚙ on the trolley controller screen.
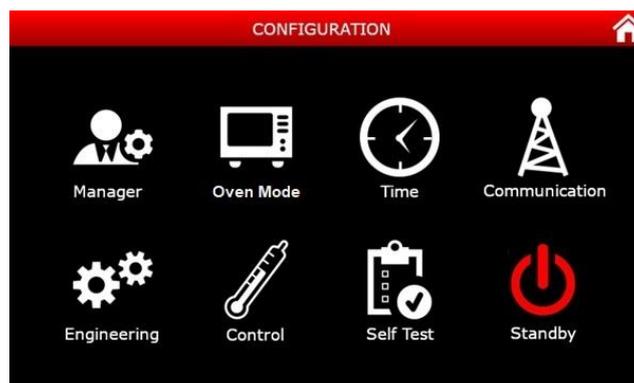
While using screens Manager/Oven Mode and Time Icon.: Use Manager PIN: <2555> to unlock and access.

Communication/Engineering/Control/Self-Test requires an engineering PIN. (For Qualified Service Personnel). See Install and Service instruction manual.

Standby Icon. Switches off all fans etc... everything apart from the screen (no PIN required).

⚠ **NOTE: STANDBY MODE WILL NOT ENGAGE UNTIL CHILLER AND OVEN IS SWITCHED OFF.**

Please note: Unit must be left in standby mode if Oven mode (automatic/semi-automatic) timer is required.

←	Back	Returns to the PREVIOUS screen	
⌂	Home	Returns to the **MAIN** screen	

4.2 MANAGER SETTING

4.2.1   To Access configuration on main screen, touch the cogs icon [cogs icon] on the trolley controller screen.

4.2.2   To access the **MANAGER SETTINGS**, touch the [icon] on the configuration screen.

4.2.3   Use Manager PIN: <2555> to unlock and access.

Reference	Parameters	Factory Pre-Set
Refrigeration Tmp	Adjustable between 2°C and 5°C where applicable.	3°C
Plate Warmer Tmp	Maximum of 60°C where applicable	50°C
HACCP Temperature	*Adjustable between 63°C and 90°C	82°C
Buzzer	Adjustable On or Off	On
Battery Time	Adjustable On or Off	Off
Manual Mode PIN?	Adjustable On or Off	Off
Manual Prompts	Adjustable between On and Off	Off
Trolley Number	Selectable trolley I'D Number	As serial no
Show Pre-Heat Temp	Adjustable On or Off	Off
Boost	Enters the Boost menu	10 Mins
Clean	Enters the Clean menu	45 Mins
Hold	Enters the Hold menu	120 Mins
Hotplate	Enters the Hotplate menu	Off
Manual	Enters the Manual menu (pre-heat)	200°C for 35 mins
	Enters the Manual menu (cook)	190°C for 90 mins
Meal Times	Enters the Mealtimes menu (**HACCP** Mealtime Parameters)	Breakfast 05:00 Lunch: 12:00 Dinner: 17:00
Left Hand Unit	**Trolley Setup Info: Unused, "Oven, Fridge and Plate Warmer"	Factory Set
Right Hand Unit	**Trolley Setup Info: Unused, "Oven and Fridge"	Factory Set

*Refer to your local guidelines and statutory requirements.

** No Adjustment, this must not be altered, will invalidate warranty.

4.3   MANAGER REFRIGERATION TMP

To set the default temperature for the chiller. The standard chiller range is between 2°C and 5°C.

4.3.1   Access Manager setting screen as per Section 4.2.

4.3.2   To change setting touch the relevant box and enter your desired value <ENT> to confirm.

4.4   MANAGER PLATE WARMER TMP (F2HRP MODELS ONLY)

To set the default temperature for the plate warmer. Standard plate warmer temperature is 50°C.

4.4.1   Access Manager setting screen as per Section 4.2.

4.4.2   To change setting touch the relevant box and enter your desired value <ENT> to confirm.

4.5   MANAGER HACCP TEMPERATURE

To set the default HACCP requirements. The unit has a range of 63°C to 90°C.

 CONSULT YOUR LOCAL GUIDELINES AND STATUTORY REQUIREMENTS. FOR HACCP REQUIREMENTS.

The HACCP food probe should be cleaned using sterile wipes, care must be taken as it is sharp.

4.5.1   Access Manager setting screen as per Section 4.2.

4.5.2   To change setting touch the relevant box and enter your desired value <ENT> to confirm.

Please refer to section 5

4.6   MANAGER BUZZER

To switch buzzer on or off.

4.6.1   Access Manager setting screen as per Section 4.2.

4.6.2   To change setting, touch the on or off selection.

4.7 MANAGER BATTERY TIME

 THIS IS A FACTORY FITTED ACCESSORY (MUST BE ORDERED AT TIME OF ORDER).

The battery is fitted to monitor temperature data when unit is unplugged whilst in transit between locations. Only used in conjunction with IOT optional extra. The below settings allow the manager the ability to define the adequate time to cover the disconnect time from the mains supply when the unit is in transport. This is set in minutes.

4.7.1   Access "**MANAGER SETTING"** screen as per Section 4.2.

4.7.2   To change setting touch the relevant box and enter your desired value <ENT> to confirm.

4.8 MANAGER MANUAL MODE PIN

This is an option to protect set temperatures on the touchscreen. If selected "on" there will be a requirement to enter the managers passcode to alter temperature.

4.8.1   Access **"MANAGER SETTING"** screen as per Section 4.2.

4.8.2   To change setting touch the on or off.

4.9 MANAGER MANUAL PROMPTS

An overlay of additional information on each command Icon.

4.9.1   Access **"MANAGER SETTING"** screen as per Section 4.2.

4.9.2   To change setting touch the on or off.

4.10 MANAGER TROLLEY NUMBER

User defined number to identify and track trolley. The number will be displayed on the information bar at the bottom of the main screen.

4.10.1   Access "**MANAGER SETTING"** screen as per Section 4.2.

4.10.2   To change setting touch the relevant box and enter your desired value <ENT> to confirm.

4.11 MANAGER-SHOW PRE-HEAT TEMP

4.11.1   Access **"MANAGER SETTING"** screen as per Section 4.2.

4.11.2   To change setting touch the relevant box and enter your desired value <ENT> to confirm.

4.12 MANAGER BOOST

Boost can be pre-set here to defined temperature and time. This will activate when the boost icon is touched on the main screen.

4.12.1   Access **"MANAGER SETTING"** screen as per Section 4.2.

4.12.2   To change settings, touch the relevant box and enter your desired value <ENT> to confirm.

4.13 MANAGER MEALTIMES

This groups times of the day between for example: Breakfast, Lunch and Dinner. It is used in conjunction with the HACCP reporting information.

4.13.1   Access **"MANAGER SETTING"** screen as per Section 4.2.

4.13.2   To change settings, touch the relevant box and enter your desired value <ENT> to confirm.

4.14 MANAGER CLEAN

Clean can be pre-set here, this is to define temperature and time. This will activate when the Clean icon is touched on the main screen. Maximum Time is 60 minutes refer, to cleaning procedure in section 5

4.14.1   Access **"MANAGER SETTING"** screen as per Section 4.2.

4.14.2   To change settings, touch the relevant box and enter your desired value <ENT> to confirm.

4.15 MANAGER HOLD

4.15.1   Access **"MANAGER SETTING"** screen as per Section 4.2.

4.15.2   To change setting touch the relevant box and enter your desired value <ENT> to confirm.

4.16 MANAGER HOTPLATE

This is a time delay option which engages the hotplate to switch on automatically a set-time **from** the end cook time. For example, if set to 20mins the hotplate will switch on 20mins before the food is ready to come out oven.

4.16.1   Access" MANAGER **SETTING"** screen as per Section 4.2.

4.16.2   To change setting touch the relevant box and enter your desired value <ENT> to confirm.

4.16.3   To change hotplate temperature, reduce power by percentage of what temperature you require. For example, 50% will reduce temperature to approx. 40 degrees.

4.17 MANAGER MANUAL (PRE-HEAT AND COOK TEMPS)

To define the pre-heat and the cook temperature and time when using manual mode.

4.17.1   Access **MANAGERS SETTING** screen as per Section 4.2.

4.17.2   To change setting touch **"MANUAL"** box, this will open the "**MANAGER MANUAL**" mode screen as below:
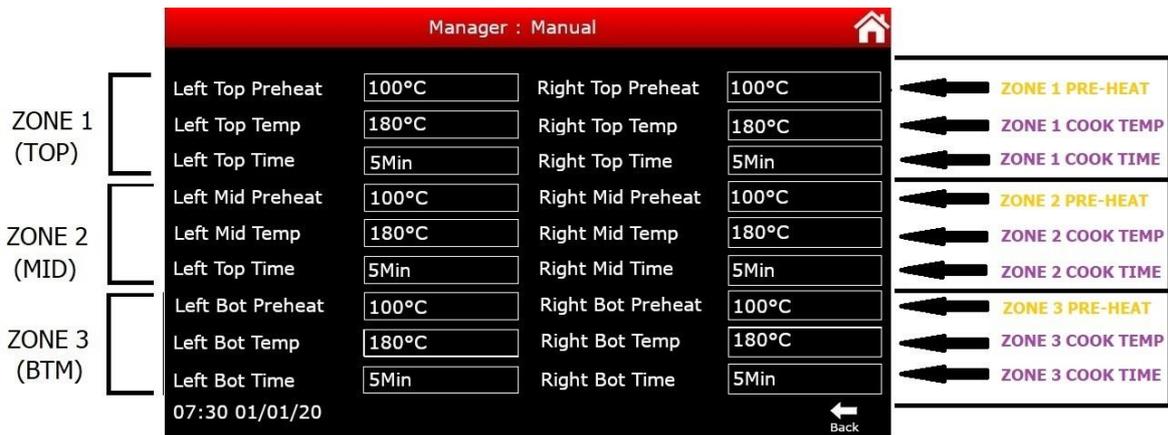
Above screen is shown as a double oven (F2HH). Some units will have left or right side greyed out. For Pre-Heat settings please ensure all temperatures are set to the same value.

4.17.1   To change setting touch the relevant box and enter your desired value <ENT> to confirm.

4.17.2   To enable additional zones, use the provided shelf dividers in the below positions and change the above software settings to match.

Section 4.17.3 Zone Option Diagram

Section 4.17.2 Zone Option Diagram
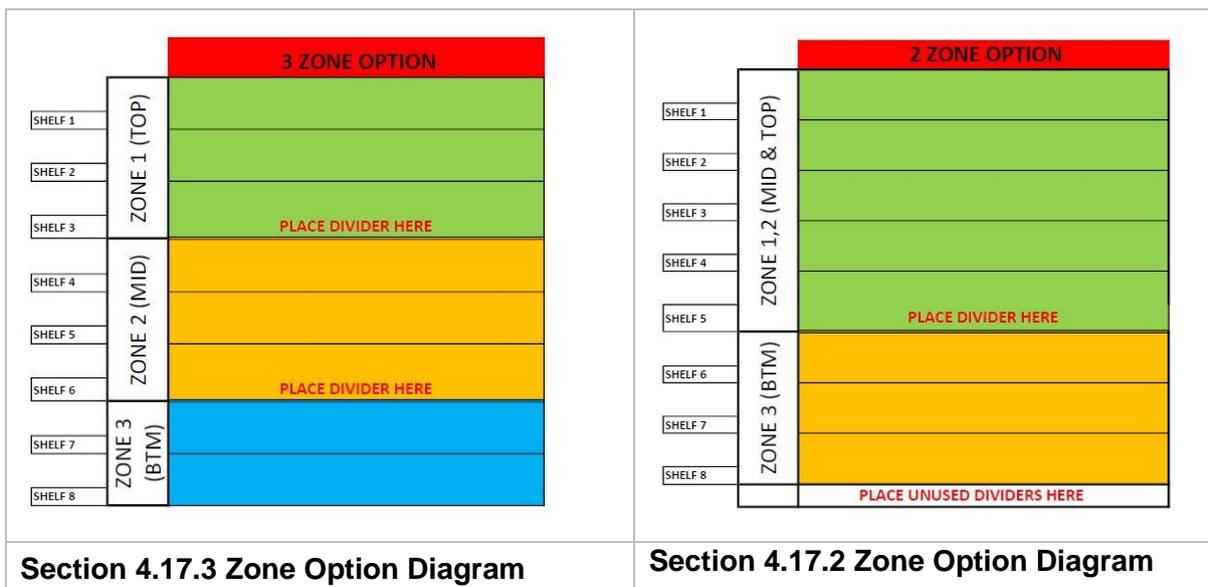
4.17.3   To exit touch the home Icon.

4.18 OVEN MODE (AUTOMATIC) MAIN MENU

User defined timer programs for repetitive daily servings.

4.18.1   To access configuration on main screen, touch the cogs icon on the trolley controller screen. The configuration screen will be displayed as below:
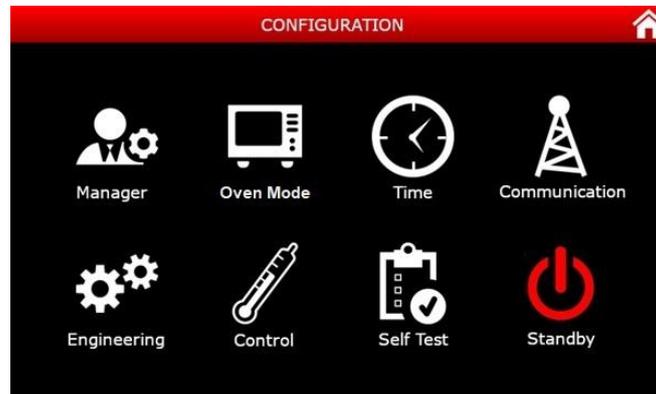
4.18.2   To access the oven mode (automatic) settings, touch the icon on the configuration screen.

4.18.3   Use Manager PIN: <2555> to unlock and access.
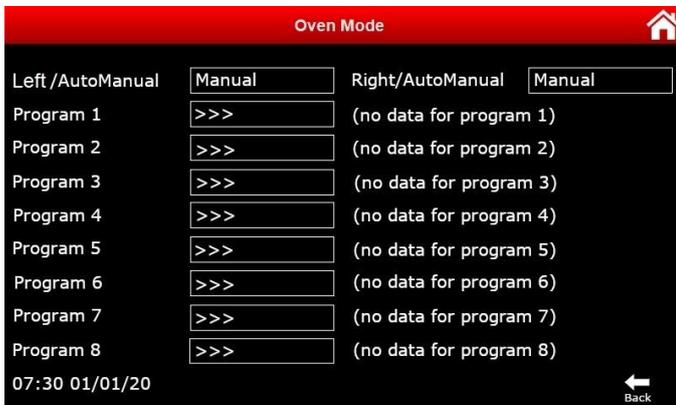
F2HH Model Shown
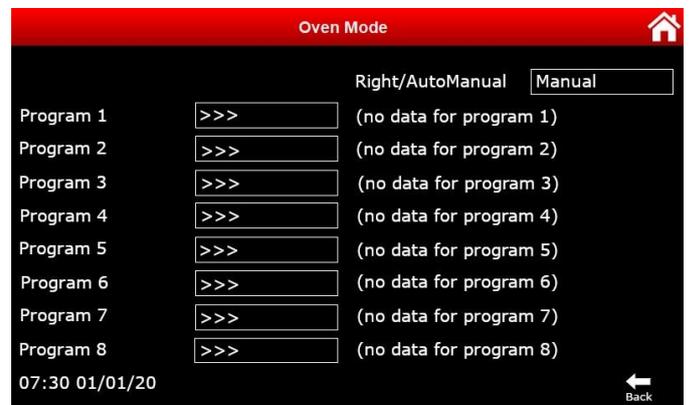
F1H, F1V, F2HR, F2VR & F2HRP Models shown

The screen will be displayed either of the above.

4.18.4   To set the trolley to operate in automatic mode change the top "auto manual" box from manual to the automatic option by touching the box and selecting "auto".

The trolley is set in auto mode and will operate with the programs that have been set and activated.

4.18.5   To enter a program, touch the relevant box to select your program number.

Non-Active programs will be displayed as ">>>". Active programs will be displayed
"(Active)>>>". Once a program is active/enabled the trolley will run as per what is set in
the desired program(s) The Trolley can be left in standby mode and will switch on
automatically as per the program. See below example of a program:

4.18.6   "**Enable?**" Touch the box and chose either "on" or "off".

4.18.7   **Active Days**" Touch the box and choose which days you wish to enable the
             program to run.

4.18.8   **"Preheat"** This enables pre-heat to be switched off in auto mode, Select on
             or off.

4.18.9   **"Cook Start Time"** Select what time you wish the **food loading** time to
             begin. Note if pre-heat is used this will be automatically added in preparation
             to cook time. <ENT> to confirm. Note: Sufficient pre-heat time must be
             calculated before cook time. Desired cook start time for example 12:30 Pre-
             Heat must be set to come on at 11.59 to give a 30 minute pre-heat.

4.18.10   "**Preheat Temp**" Touch the box and enter desired temperature <ENT> to
             confirm.

4.18.11   "**Left/Right Oven**" Chose which chamber that will be in operation. Note this
             option is only available in a double oven setup (F2HH).

4.18.12   **"Fridge"** Select on or off

4.18.13   **Fridge Start Time"** Select what time you wish the fridge to switch on for.
             Note depending on which model give approx. 30mins to enable the unit to
             sufficiently cool down in preparation in preparation for loading. <ENT>.

4.18.14   "**Top/Mid/Btm Oven**" Touch the box and one of the below screens will
             display; depending upon whether the multistage has been activated ON/OFF.

Figure 1:
If Multistage cooking is deactivated "OFF".

Automatic : Program 1 : Top Oven

Cooking Temp 1   170°C   Cooking Time 1   50Min

Copy To Other Ovens

07:30 01/01/20   Back

4.18.15   "**Cooking Temp**" Touch the box and enter your desired temperature <ENT> to confirm.

4.18.16   "**Cooking Time**" Touch the box and enter your desired temperature <ENT> to confirm.

4.18.17   If using "**Multistage-stage cook"** (see below figure 2 example) Touch the box and enter the number of stages of cooking required and continue to enter the relevant **Cooking Temp** and **Cooking Time** data for each stage. Oven chamber can be configured for up to Three Cooking zones.

Figure 2 If Multistage cooking is activated."ON"	Number of stages = 4	Temperature	Time
 Automatic : Program 1 : Btm Oven Number of Stages 4 Cooking Temp 1 170°C Cooking Time 1 50Min Cooking Temp 2 0°C Cooking Time 2 10Min Cooking Temp 3 170°C Cooking Time 3 20Min Cooking Temp 4 0°C Cooking Time 4 10Min Copy To Other Ovens 07:30 01/01/20 Back	1st Cook cycle 2nd Cook cycle 3rd Cook cycle 4th Cook cycle	170°C 0°C (off) 170°C 0°C (off)	50 Mins 10 Mins 20 Mins 10 Mins
Above shows **"Btm Oven" (**see section 4.17.2 for Zone Diagram)		Total Cook:	90 Mins

"**Copy to Other Ovens**" Is only available on the Top Oven settings and will enable the user to cascade down the setting into the other zones.

4.18.18   "**Remaining Food At"** Touch the box on the screen and enter the required cook time and <ENT> to confirm (This time will be automatically offset from the end of the cook cycle)

This function is for the use of delicate / texture modified food groups where there is a short cook time. The trolley will flash, and a screen message will show, if the buzzer is active this will also sound.

4.18.19   "**Variotherm Mode**?" Select the box and chose either "On" or "Off" (F1V, F2VR Models Only).

This function is used when the fridge mode is active, and the user wishes to set a time for unit to automatically switch to oven mode and start to heat up the chilled contents without having to load and unload the contents.

4.18.20   "**Multi-stage cooking"** Select the box and chose either "on" or "off".

Each oven zone can be set to **Multi-stage cooking**, allowing for up to 6 different temperatures and times to be entered. This enables greater control over the zones, allowing various foods with different cook times to all be entered at the same time.

4.19 OVEN MODE (SEMI AUTOMATIC) MAIN MENU

Gives the user the ability to pre-set 3 quick start programs that are displayed on the main screen. This provides a clear and simple user interface.

4.19.1 Access configuration on main screen, touch the cogs icon on the trolley controller screen. The configuration screen will be displayed as below:
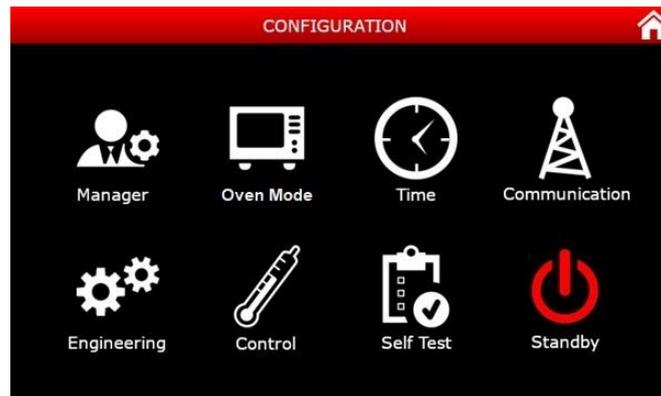
4.19.2 To access the oven mode (semi-automatic) settings, touch the icon on the configuration screen.

4.19.3 Use Manager PIN: <2555> to unlock and access.
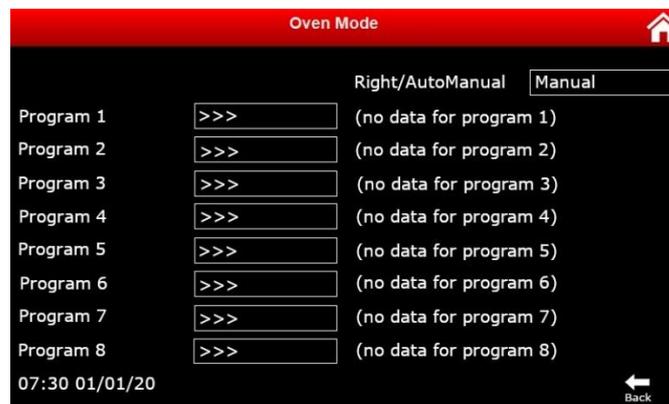
The screen will be displayed as above.

4.19.4 To set the trolley to operate in semi-automatic mode change the top right box from manual to the semi-automatic option by touching the box and selecting "semi auto".

The trolley is set in semi auto mode and will operate with the programs that have been set and activated.

4.19.5　　　To enter a program, touch the relevant box to select your program number.

4.19.6　　　To create and enter program into the appliance **See Section 4.17.5.**

4.19.7　　　Touch the home icon to save and exit.

4.19.8　　　The main screen will have changed as below

Note: Pre-heat must be started manually on semi-automatic.
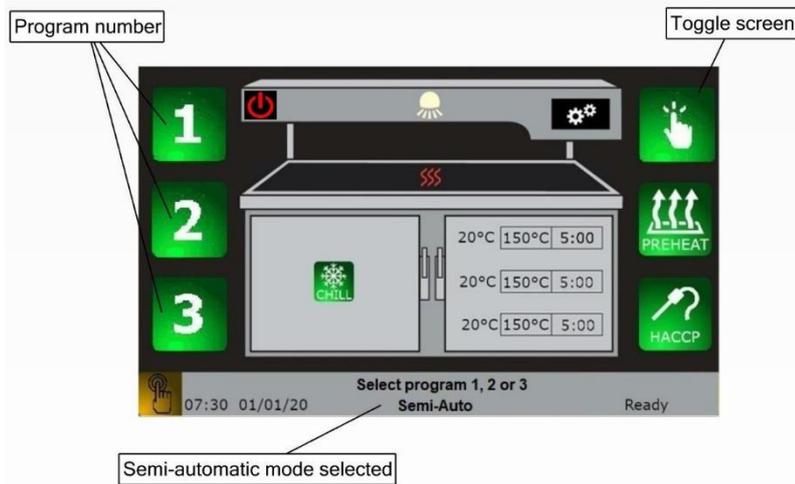
4.19.9　　　Programs 1, 2 and 3 are now available on the main screen. Touch the desired Icon to begin the cook program.

Note With these programs: time, temperature & active days are pulled from the first three programs that are set in the oven mode automatic programs (**See Section 4.18.7)**

Additionally, by touching the toggle icon the user can access Boost, Hold and Clean as shown below.
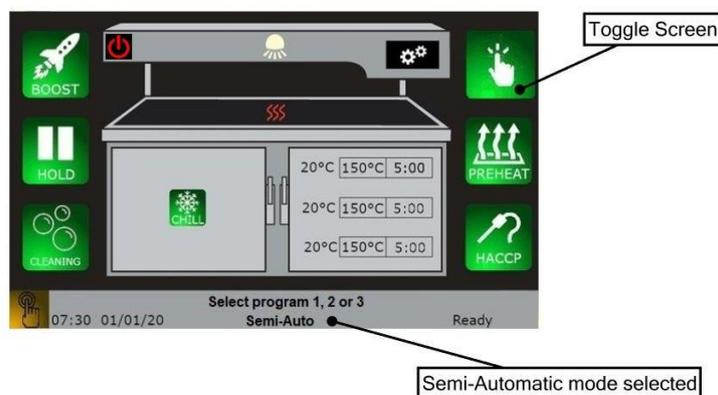
4.20 SET TIME

To set time on the appliance.

4.20.1   Access configuration on main screen, touch the cogs icon on the trolley controller start-up screen, screen will change to below.
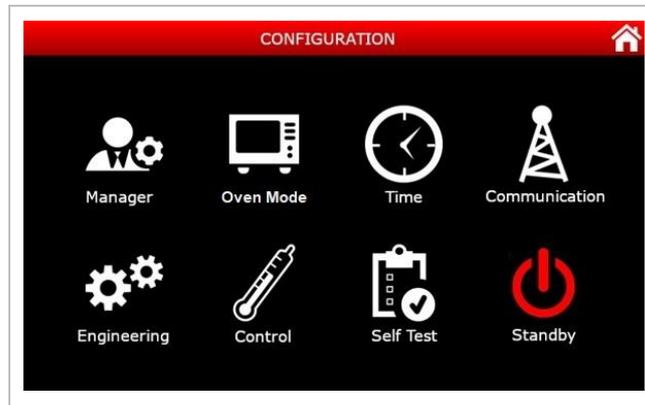
4.20.2   Touch the time icon to access.

4.20.3   Use Manager PIN <2555> to unlock and access. Screen will be displayed as below:

4.20.4   Select relevant box and enter details accordingly.

Time	Adjust to current time (24hr)
Date	Adjust to current date (dd:mm:yy)
Day	Adjust to current day
Daylight Saving	Adjustable between EU and US

4.20.5   Touch the home icon to exit.

4.21 COMMUNICATIONS MENU

The communications settings screen and displays IP addresses and parameters. These have been pre-set by the factory and should only be changed by qualified service personnel.

This menu is used in conjunction with the WIFI Accessory Kits.

THIS IS A FACTORY FITTED ACCESSORY (MUST BE ORDERED AT TIME OF ORDER).

5.0 CLEANING AND ROUTINE MAINTENANCE

When removing heavy items to aid cleaning or maintenance particular care should be taken. A manual handling risk assessment is the best way to determine the level of risk to anyone using or maintaining this equipment. To help with such an evaluation we have included the weights of individual components that may present significant risk.

For further help and information on manual handling and associated risk assessment we would refer you to you the Health and Safety Executive website; www.hse.gov.uk document ref: manual handling at work INDG143. International customers should default to the health and safety guidelines provided by your government body.

Other useful references for health and safety issues:

- www.hse.gov.uk
- Essentials of health and safety at work ISBN978
- Noise at work INDG362
- Safe systems of work
- Other notes added to the body of the instructions.

BEFORE ANY DEEP CLEANING IS UNDERTAKEN, ISOLATE THE APPLIANCE FROM MAINS POWER SUPPLY

SUITABLE PROTECTIVE CLOTHING MUST BE WORN WHEN CLEANING THIS APPLIANCE.

THE APPLIANCE MUST NOT BE STEAM CLEANED. DO NOT USE ACID OR HALOGEN-BASED (E.G. CHLORINE) DESCALING LIQUIDS, FLAMMABLE LIQUIDS, CLEANING AIDS OR CLEANING POWDERS.

FAILURE DUE TO LACK OF PROPER CLEANING IS NOT COVERED BY WARRANTY.

NOTE: All surfaces are easier to clean if spillages are removed before becoming burnt on, and the appliance is cleaned daily.

It should be noted that certain scouring pads including nylon types can easily mark stainless steel. Care should be exercised during cleaning process. When rubbing stainless steel with a cloth, always rub in the direction of the grain.

MAINTENANCE CHECK

- Regular servicing of the appliance should be undertaken to ensure correct operation, it is functioning as intended, and safe to use. We recommend servicing after 2,500 hours of use, or annually, whichever comes first.

- Any maintenance schedule should be carried out in accordance with SFG20 Maintenance Schedules. Should any issues with the integrity of the components be identified these should be replaced. If the appliance is not considered safe the unit should be removed from service and the responsible person advised why the unit is not safe to use and what remedial action is needed. Contents of the maintenance schedule should be agreed with the maintenance provider.

5.1   BEFORE SERVICE CLEANING UNITS WITH A FRIDGE

If the appliance is fitted with a fridge there may be a small gathering of water on the base of the chamber and drip tray.
After every service, carefully remove drip tray and wipe dry both chamber and tray.

Note - Trolleys fitted with a loading cassette system will not have a drip tray.

5.2   CONDENSER & FAN CLEANING

5.2.1 Condenser cleaning routine should be reviewed periodically and checked by qualified service personnel / maintenance service provider. It is the site responsibility to ensure this is regularly inspected and cleaned if required.

NOTE: SOME UNITS ARE NOT FITTED WITH CHILLER. CHECK YOU MODEL NUMBER TO CONFIRM

BEFORE CLEANING IS UNDERTAKEN, ISOLATE THE APPLIANCE FROM MAINS POWER SUPPLY

SUITABLE PROTECTIVE CLOTHING MUST BE WORN WHEN CLEANING THIS APPLIANCE.

WHEN CLEANING CONDENSER ENSURE YOU ARE IN A WELL-VENTILATED AREA.

ISSUES DUE TO LACK OF PROPER CLEANING IS NOT COVERED BY WARRANTY.
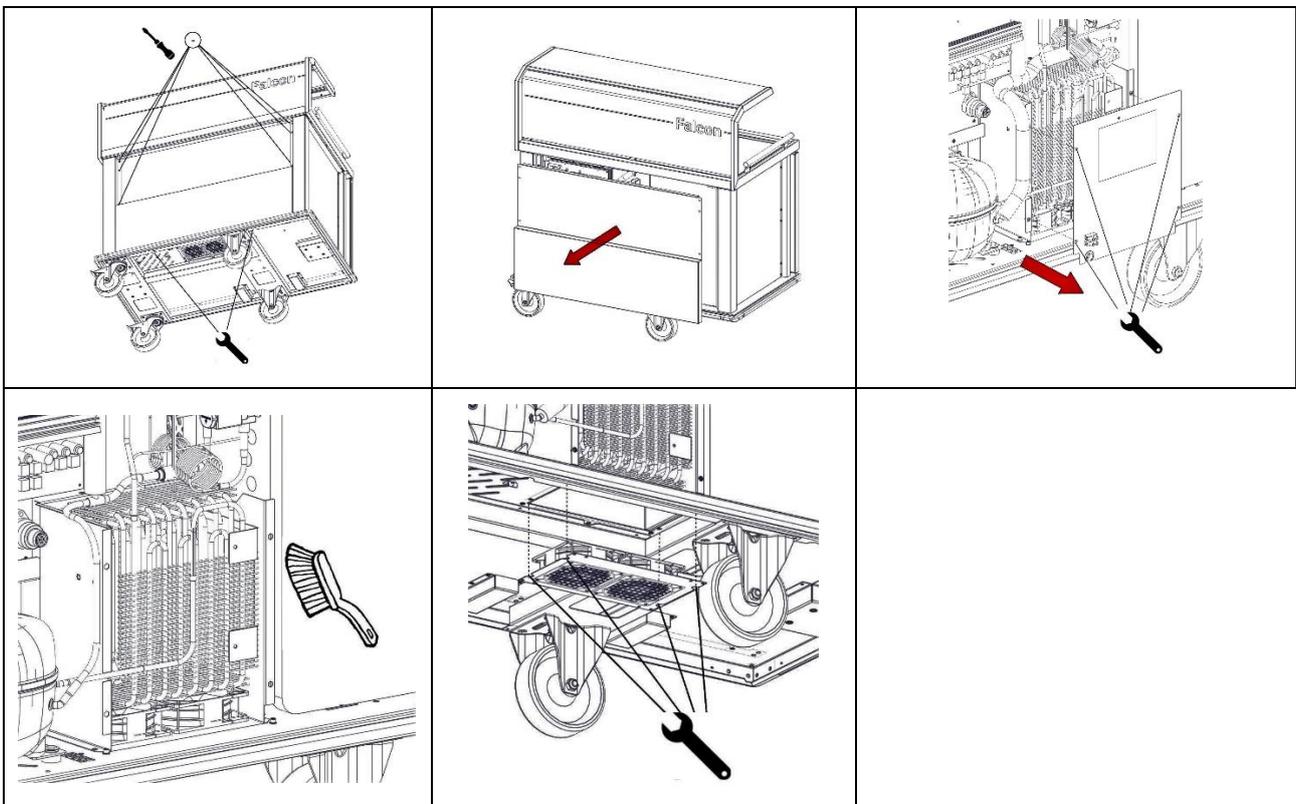
5.2.1 Wipe clean condenser fan blades if necessary.

5.3 CLEANING GUIDE

PARTS:	HANDWASH	SANITATION	DISHWASHING	JET WASHING	NOTES FOR: *Meal Delivery System*
Oven / Fridge Chamber	✓	✓	✗	✗	Wipe dry after cleaning
Oven Shelfs	✓	✓	✓	✗	Do not use abrasive cleaning pads
Interior Surfaces	✓	✓	✗	✗	
Heated glass worktop	✓	✓	✗	✗	Do not use abrasive pads
Exterior Outer Panels	✓	✓	✗	✗	Wipe dry after cleaning
Exterior stainless steel	✓	✓	✗	✗	Use non-abrasive cleaner
Gaskets/Seals	✓	✓	✗	✗	
Touch Screen	✓	✓	✗	✗	Use damp cloth only
Bezel	✓	✓	✗	✗	Use damp cloth only
Food Probe	✓	✓	✗	✗	Use sterile wipes and gently clean as it is sharp
Sneeze screen	✓	✓	✗	✗	Use soft cloth with warm water & mild detergent. Do not use abrasive pads / cleaners or ammonia based products.
Loading Dolly	✓	✓	✗	✓	Wipe dry after cleaning
Cassette	✓	✓	✗	✓	Wipe dry after cleaning

✓ **ACCEPTABLE**   ✗ **NOT ACCEPTABLE**

5.4   OVEN CLEANING CYCLE

With the appliance powered off. Remove any excessive spillage from the oven chamber.

5.4.1   Place a dish or tray (approx. 0.5 Litre) containing water and mild detergent onto the 2nd shelf (top area of chamber).

5.4.2   Close the oven door.

5.4.3   Switch on oven

5.4.4   Pressing the **CLEANING** button will enter cleaning mode.

This will operate at 97°C for 45 minutes as default (pre-set times can be altered in the managers clean parameters in the **"MANAGERS SETTINGS"** menu section 4.2).

The **Main screen** will change to show that the oven is in the clean cycle.

The LEDs on the gantry will change from **Green** to **Magenta**.
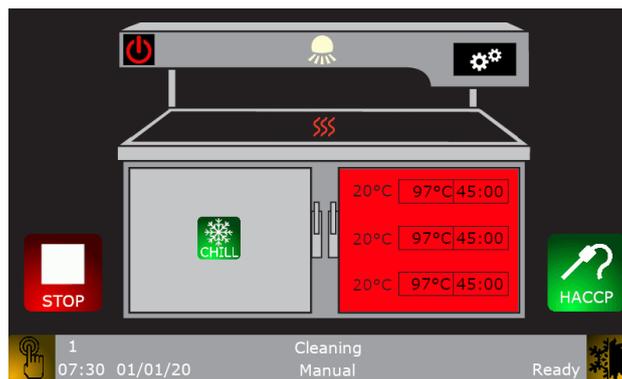
5.4.5   This mode will continue until the Stop Icon is pressed or if it completes its cycle.

The LEDs on the gantry will change to flashing **Green** to indicate that the timer has finished.

6.0 FACTORY FITTED ACCESSORIES
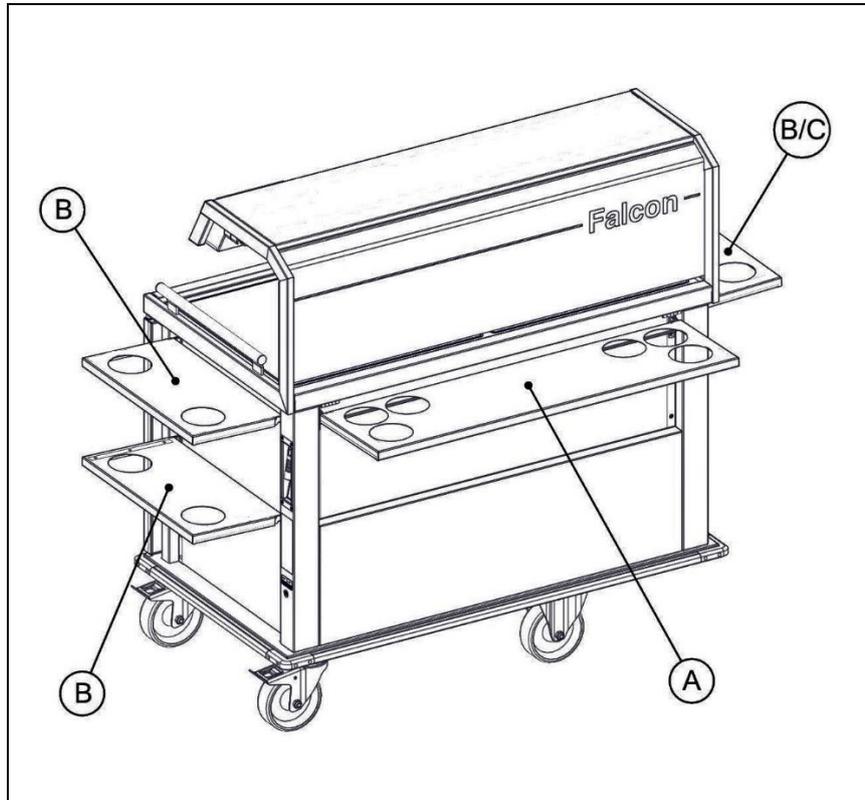
A	Vario-Therm tray slide (F1 OR F2 units).
B	Vario-Therm end shelf.
C	Vario-Therm end shelf waste bag holder.
D	Vario-Therm WIFI Network Base Station (1 per network)
E	Vario-Therm WIFI Network Client Station (1 per trolley)

7.0 FAULT FINDING (USER)

FAULT	POSSIBLE CAUSES	REMEDY	USER	*ENG
Will not turn" ON"	Not plugged in	Plug In	✓	
Small puddle of water in fridge compartment base	Evaporator coil will generate a small amount of water when returning to ambient temperature.	Wipe drip tray and chamber dry after every service.	✓	
Touchscreen blank but trolley running	Ribbon cable from screen to control board in gantry dislodged	Call engineer		✓
Ovens slow to heat	Defective element	Call Engineer		✓
	Element Fuse blown	Call Engineer		✓
Oven over temperature	Convection fans failure	Call engineer		✓
	Convection fans fuse blown.	Call engineer		✓
Fridge not reaching temperature (Over temperature)	Compressor Fuse blown	Call engineer		✓
	Solenoids blown (Variotherm models only)	Call engineer		✓
	Condenser covered in dust	Clean (as section 5.2)	✓	
	Condenser cabinet fans failed	Call engineer		✓
	Condenser cabinet fans fuse blown.	Call engineer		✓
	Loss of refrigerant due to leak	Call engineer		✓
Fridge frosting over	Faulty thermocouple probe	Call engineer		✓
	Damaged evaporator coils	Call engineer		✓
	Fan failure	Call engineer		✓
	Fan fuse blown.	Call engineer		✓
Hot-Plate not working	If only one side working, high probability of defective heat pad element	Call engineer		✓
	If both sides are not working, high probability that a fuse has blown.	Call engineer		✓

PROBLEM	POSSIBLE CAUSES	REMEDY	USER	*ENG
Ovens slow to heat	Wrong temperature setting	Change to desired temperature setting	✓	
Fridge not starting	Fridge requires to be below 30°C before the compressor will be allowed to start.	Allow fridge cavity to cool down.	✓	
Fridge not reaching temperature	Wrong settings in the managers settings for the Refrigeration Tmp	Check and input correct desired temperature.	✓	
	Chamber overloaded – not allowing air flow to recirculate.	Remove some contents to provide better airflow.		✓
Water on floor	Normal operation of chiller.	Refrigeration chamber wiped clean after use.	✓	
Yellow Flashing Light	Door(s) Left Open	Close Door	✓	
Red Flashing Light	Door(s) Left open for prolonged period.	Close Door	✓	
'Service due' message appears on screen.	Service limit reached.	Engineer to service unit. On completion the 'Service' hours field (see section 3.17) should be reset to zero. Note-Service limits should be set in line with the 'Maintenace check' statement on Pg48.		✓

8.0 **SERVICE INFORMATION**

This unit carries an extensive mainland UK warranty. The warranty is in addition to and does not change your statutory or legal rights.

The warranty policy can be found on our website which details the conditions of the warranty and the exclusions.

https://www.falconfoodservice.com/info-centre/policy

Service calls to equipment under warranty will be carried out in accordance with the conditions of sale.

Warranty calls can be made between 8:30 am and 5:00 pm weekdays only.

To ensure your warranty enquiry is handled as efficiently as possible, ensure you have the following appliance information prior to calling us:

1. Model number – found on data plate
2. Serial number – found on data plate
3. Brief description of the issue

To contact Falcon for a warranty issue dial (UK only) 01786 455 200 and select Warranty Issues from the menu.