LightFry



User Manual

MODELS 12E, 12U, 12C, 12EM AND 18EHC



WARNING



TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT REMOVE MACHINE COVERS. NO USER-SERVICEABLE PARTS INSIDE. REPAIR SHOULD BE DONE BY AUTHORIZED SERVICE PERSONNEL ONLY.



This document is under revision and it may be subjected to modifications. *Please contact your machine supplier for the latest version.*



Rev. 240303

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2 Important information



CAUTION



Please, for your own safety, read this manual carefully before operating the Lightfry unit

Appliance shall not be cleaned with water jets

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similar qualified person in order to avoid a hazard

Staff using the oven must be thoroughly briefed and trained before using the Lightfry unit. Make sure that you keep this manual in a place where everyone can easily find it.

Incorrect installation, maintenance, servicing or cleaning to the oven may result in damage, injury or death.

The oven should be serviced by an authorised service partner at least once a year to ensure that the oven remains in perfect working order.

Do not install closer than 2"/ 50mm from the rear side

Unit must be installed with adequate backflow water protection to comply with applicable federal, state and local regulation codes.

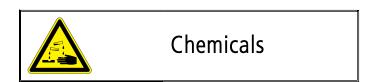


Hot Surfaces

The oven operates internally with hot hair temperatures around 260 °C (500 °F), therefore there is a risk of burning yourself if not properly operated. Please read this manual, before operating the oven, avoiding this step could cause you serious damages. Use the Cool Down function to drop the temperatures to a safe level before operating the internal parts.

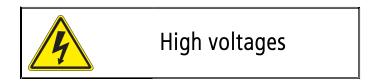
There is a risk of burning yourself while operating the food basket container, therefore use safety high temperature gloves while operating the food basket container.

There is a risk of fire if the oven is not properly cleaned or washed due to the deposits of food residues or grease in the oven chamber.

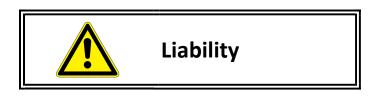


The oven uses special formulated washing detergents that **should be handled by trained personnel**. Remember always to use full clothing, gloves and face protection when operating the washing detergents. **In case of contact with the detergent, rinse with water and contact your nearest hospital for assistance**.

Please refer to the detergent safety document for more detail information



The machine is operated at high voltages and high currents, therefore the machine should be inspected, having performed maintenance or repaired **only by trained technicians**.



Performing any of the following steps will **invalidate the manufacturer's warranty and product liability**;

- ✓ Avoiding to perform a daily maintenance and needed washing cycle after normal use.
- ✓ Operating the oven outside the intended use explained in this document.
- ✓ Installations and repairs that are not carried out by authorised specialist.
- ✓ Performing any technical changes to the oven that is not approved by the manufacturer.

3 LightFry unit — Basic installation

LightFry 12E-12U-12C-12EM-18EHC - Specifications				
Width	693	mm	27.3	inch
Height	711	mm	28	inch
Depth	645	mm	25.4	Inch
Weight 12E, 18EHC	100	kg	220.5	pounds
Weight 12U, 12C, 12EM	105	kg	231,5	pounds
Power	16	kW		
Max. Cooking Temp	260	$^{\circ}C$	500	F
Noise level	67	dB		
		ECOL	LAB Mip SM	<i>'X</i>
Detergent Type	ECOLAB — Trump XL (UK)			
Mandatory to use only,	KERSIA – Deptal K			
Else warranty is void	Johi	nson Divers	sey – VC82 .	Superquest

Important notes:

- ✓ The LightFry unit needs an air gap behind the machine, at least 50 mm, for release of ventilation air. The oven does not need air gaps on the sides.
- ✓ LightFry unit must be installed on a level base and be balanced. Check with a spirit level.

3.1 Machine information plate

The unit serial number, model and power information may be located either on the bottom base on the left hand side, Fig 1a, or on the outer left panel Fig 1b. Check the following pictures that shows what the rating plate looks like and where they are positioned for the correct machine info.



Figure 1b – Machine information plate, on the left hand side outer panel



Figure 1a — Machine information plate, bottom base left hand side

3.2 Power connection



An external branch-circuit overcurrent protective device must be installed with a rated current of 50A. Please check your local regulations for the correct installation requirements.

The incoming power cable is connected internally to a connection block, 3 phases, neutral & ground, situated in the rear side of the oven all the way down on the DIN rail.

The LightFry unit is provided with **Internal fuse** protections for the different motors and heating elements that are placed inside the electric cabinet. The oven is also provided with a **mechanical over** heat protection set up to 300°C (572°F).

3.3 Water connection

The incoming cold water connection is made in the rear, bottom part of the oven. The cold water connection is a standard threaded 3/4-inch connection, due to space restrictions it's recommended to install a 90° elbow connection. The recommended water pressure is between 4 and 6 bars.

3.4 Drain connection

The waste drain connection is made in the rear, bottom part of the oven. The connection is made out of a standard 1-inch connection nipple connection. Note that the temperature of the waste water during the washing cycle could be as hot as 80°C (176°F), be aware that the drain hose could become softer and produce blockages in the hose bends.

3.5 Starting the oven for the first time

It is recommended to perform a short wash program with detergent followed with an Autoheat function in order to remove any possible particles inside the oven. Note that new ovens are washed, auto-heated and tested in the factory before delivery.

4 Machine operation



Figure 2 – LF12E unit front side

In Figure 2 the front side of the Lightfry unit is displayed where you can find the main on/off switch (1), the food basket door (2) and the user touch screen display (3). The following sections will describe the main machine operations as cooking, washing or its basic maintenance.

4.1 Machine start-up and shut down

Use the main switch no. 1; see Figure 2, to turn the power on in the machine. During start up a LightFry logo will be displayed with the current firmware version and the machine will run the necessary initialization procedures, note that this process can take up to 1 minute. After the initialization is finished, the main screen menu will be displayed. FOR SHUT DOWN, ALWAYS RUN COOL DOWN PROGRAM BEFORE TURNING OFF THE POWER TO AVOID TRIGGING THE MECHANICAL OVERHEAT PROTECTION, TO AVOID DOWN TIME!



If needed, the machine initialization can be skipped if you place the food basket container in the open position, pulled out a bit, see Figure 6.

4.2 Main Menu Screen

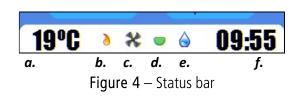
In Figure 3, the Lightfry main menu is displayed. In this screen menu you can select the main functions, also at the bottom of the screen there is a status bar displaying the main oven temperature, current time and extra status icons.



Figure 3 — Main menu screen

Screen Information

- *Autoheat*: Activate the heat up function that brings the oven to temperature.
- *Cook:* access the cooking menu screen.
- Wash: access the washing menu screen.
- *Options:* access the machine options screen.



The **status bar** is showed in Figure 4, and the information displayed is the following:

- a. 19ºC Oven temperature 19°C (66 °F)
- b. A Heating power.

The flame icon will show how much power is being used by the heating elements.

- c. 🔌 Air fan motor status
 - Icon showed when air fan is active and spinning.
- d. Food basket status
 - Basket in position
 - Basket out of positionBasket is rotating
- e. 🛆 Water status

If there is water in the oven this icon will be shown.

f. **09:55** Machine time clock Current machine clock time.

4.1 Opening the food basket container door



Do not open the basket door if the basket is **rotating a** or it is **not** in **position a**, the food product could be dropped inside the oven chamber and outside the machine.

Use the door handle no 2, see Figure 2, to turn counter clock wise to unlock the basket door. Turn the cover approx. 2 cm until the pins are in the round holes — open position as in Figure 5.

Use the handle to pull out the food basket container, see Figure 6.



Figure 5 - The food basket container in open position



Figure 6 - The food basket container pulled out

To close the basket container, push the food basket container in until the door is completely closed, and the three round pins are in the round holes. Use the handle to turn the basket door 1 to 2 cm in a clock wise direction until the pins end up in the thin groove. The basket door is now in locked position, as shown in Figure 7, now you can operate the machine for cooking or washing.

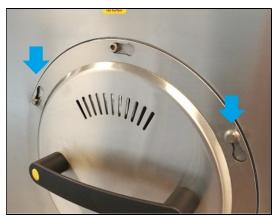


Figure 7 – Basket door in locked position



It is important to make sure that the basket door is in locked position before running any cooking or washing program

5 | Auto heat

In order to run the cooking function, the LightFry unit must be heated up to working temperature by using the Autoheat function. Please, press *Autoheat* button in the main screen, see Figure 8, to initialize the Autoheat function, as shown in Figure 9. During the Autoheat process the oven will warm up to the target stand by cooking temperature of approx. 220°C (428 °F), see Figure 9.



Figure 8 – Main menu screen.



Figure 9 - Autoheat mode, the heating elements are activated, the fan is spinning

After the machine is auto heated, the cooking menu will be automatically displayed; next section will cover the cooking functions.



The standard autoheat and stand-by temperature is 220°C ($428\,^{\circ}F$) by default. This value can be modified upon request, please contact your distributor for more information.



🍟 Cooking



Before you can select and run any cooking program the oven must be preheated using the autoheat function.

To access the cooking screen, press *Cook* button present in the main menu screen and the cooking menu screen will be shown, see Figure 10. Also, the cooking screen will be automatically displayed after the Autoheat function.



Figure 10 — Cook menu screen

Screen Information

- Back: return to previous screen
- *Quick*: access the quick cook selection menu screen.
- *Cook:* Run the selected cooking program.
- *02*:00 Chicken Nuggets: Current selected cooking program time and name.
- Prev / Next: select different cooking programs
- List: access the cooking program list screen.

Before cooking any food product, you will need to select the proper cooking program in advance. To select the cooking programs you can use the *Prev* and *Next>* buttons, shown in Figure 10, as well you can press the *List* button so the Program selection screen will be shown, as shown in Figure 11.

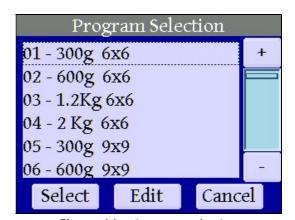


Figure 11 – Program selection

You can move up and down in the list by using the buttons marked with the + and - keys in order to select the programs. The **selected program** is displayed with a **dashed line marking box** around the program name, in this case 01. Once you have found the right program, press *Select*, to cancel the selection just press the cancel button.



If needed, you can create, edit or modify the cooking programs. Please see the Advanced manual or contact your machine supplier for more information

6.1 Quick cooking menu screen

The quick cooking menu screen gives you quick access to the first four cooking programs, which makes the selection of the cooking programs an easy process.

The quick cooking menu can be accessed by clicking the **quick button** located in the top right corner included in the **main cooking menu screen**, as shown in Figure 10. The quick cooking menu screen is shown in the following figure.

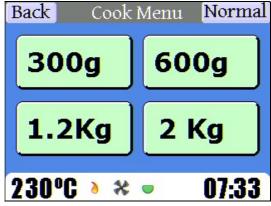


Figure 12 – Quick cook menu screen

Screen Information

- *Back*: return to previous screen
- *Normal:* Access the normal cooking screen.
- 300q: run the cook program 01 300q 6x6.
- 600q. run the cook program 02 600q 6x6.
- 1.2Kq. run the cook program 03 1.2 Kg 6x6.
- 2 Kg. run the cook program 04 2 Kg 6x6.

Note that the button text can be customized to your preferences, like 300gr or 1.2kg, please see the Advanced manual or contact your machine supplier for more information.

To run a cooking program, just press the desired button in order to automatically start the cooking program.

You must select the proper cooking program before placing any food product in the food basket container. To open the food basket container please refer to section 4.1.

To start the cook program, you have to press *Cook* button in the cook menu screen as shown in Figure 10, or any of the four buttons of the quick menu screen as shown in Figure 12. After pressing the button, the cooking will automatically start and the screen in Figure 14 will be shown.



EXIT button can be used to stop the cooking process. Wait until the basket rotates to the proper position. After you can open and remove the food product using the empty basket function.

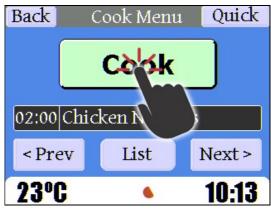


Figure 13 —Push cook button to start the cooking process.



Figure 14 — Countdown of the remaining time until the process is completed.

Ten seconds before the cooking program finish, the machine will play two short beep sounds and when the time is finished the basket will be rotated to the proper position and the machine will indicate how to proceed for the empty process.



To avoid excess food process time, proceed to **empty the basket as soon as possible**. Leaving the food too long in the basket while the oven is hot may change the final product quality.

6.3 Empty food basket container



Make sure that you place a food tray under the food basket container before you press the emptying button!

Once the cooking program is finished and the basket is in position, the **Pull out basket screen** will be shown, see Figure 16. The machine will **play continuous beeping** to indicate when you can open the basket **to empty the food basket container**. Once you pull out the basket, the **empty basket screen** will be shown, see Figure 17.



Figure 15 – The basket assumes its correct position prior to being emptied; wait until the basket is in place.



Figure 16 – The machine chirps approx. 10 seconds before it is time to pull out the basket, and the cook is ready.

To empty the food basket container you can press the **Empty button** as shown in Figure 17. The basket container will rotate one turn to allow emptying the basket container, and will then reposition itself in a filling, upright position, with the basket opening upwards.

If the *Auto-Empty* box is selected, you do not need to press *Empty* button; 2 seconds after you have pulled out the basket, the basket will start to rotate automatically.



Figure 17 – Basket empty screen.

Now you can close the basket door or fill it up with new food product to repeat the cooking process from scratch.

7 Cool down

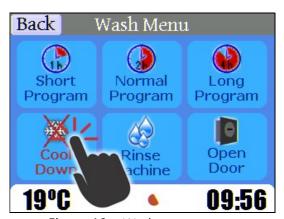


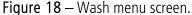
The cool down function must be executed before opening the main door, running the washing program or switching the machine off.

The oven internal temperature can be decreased using the cool down function. The cool down function will bring the oven temperature, typically 240°C (464°F) down to approximately 80°C (176°F).

Switching the machine off directly after cooking it is not recommended, such high temperatures will shorten the machine life time, if not properly cooled down.

The **cool down function** can be **accessed** using two ways; using the cool down button present in the **wash menu screen**, see Figure 29, or by the cool down button present in the **machine option screen**, see Figure 31, both screens are accessed from the main menu screen. Note that, if the oven temperature is below 80°C (176°F), the cool down button is disabled.





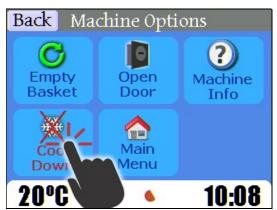


Figure 19 — Machine option screen.

Press the cool down button to bring the oven temperature to approximately 80°C (176°F). For a room temperature of 25°C (77°F), the **cooldown** process can take approximately **45 minutes**. The cool down process time can be shorter, approx **20 minutes**, if the food basket container is fully removed, note that the air fan will produce some noise.

8 Access/Inspection internal oven space



- Use cool down program before operating hot parts.
- Beware of hot surfaces, always use protecting clothing.

The oven temperature must be lower than 80°C (176°F) before you can open the main door to access the internal oven space, use the cool down function to lower the oven internal temperature.

The following instructions will show all the steps to disassemble all the parts in the oven chamber. Typically this procedure is done to remove any food residue before running the washing function.

Start by opening the food basket container's lock and **pulling out** the food basket container. Once the food basket container has been pulled out, there are two spring mechanisms, see Figure 20, on the left and right side of the food basket container which must be pressed up to pull out the basket.



Figure 20 - Lock mechanism (the middle of the picture) which is pressed up to release the food basket container; right and left side of the basket



Figure 21 – Pull out food basket container completely.

Pull out fully the food basket container, as shown in Figure 21. To open the main door, you can access the option screen and then **press the open door button**, see Figure 29.

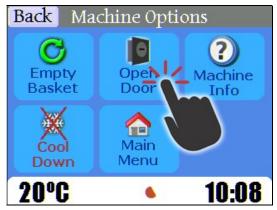


Figure 22 – Press open door button.

Now you have to remove the oven space parts to remove any possible food residue for best washing results.

Proceed to remove the round food basket holder as shown in Figure 20, the round basket holder must be lifted up at the front and pulled free from its holder in the rear part of the oven space



Figure 23 – Remove the round food basket holder.

Now proceed to lift the waste box placed inside the air duct plate by pulling straight up and then take it out of the oven space, as shown in Figure 24. Proceed to **empty the waste box** of any possible particles.

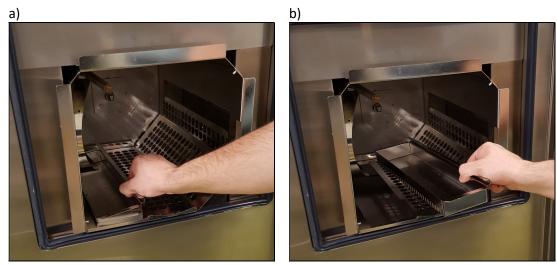


Figure 24 - Placement of the waste box in the oven space (a), and the waste box, lifted and pulled out (b)

Following, **pull out the air duct plate**, as shown in Figure **34**25, to get access to the bottom part of the oven space.



Figure 25 - Air duct plate pulled halfway out

A perforated filter plate lies down on the bottom-right side in the oven space, placed with a 45 degrees angle between the bottom and the right side, see Figure 26. Lift it up a couple of centimetres by grabbing hold of the bent edge in the middle of the perforated filter plate upper edge and release it from the threaded rod. Pull it down flat onto the floor of the oven space, push it to the left under the temperature sensor, and then lift it straight up, see Figure 26 a, b, c. Proceed to remove any food particles from the perforated filter plate.

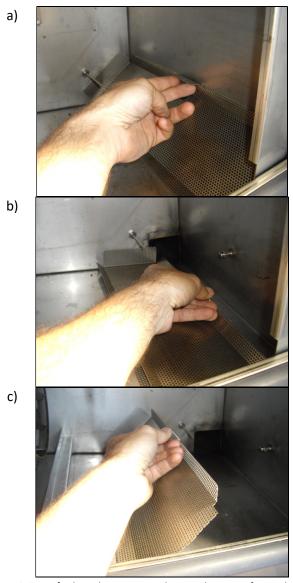


Figure 26 - Lift the plate upwards to release it from the nut (a), pull the plate along the oven floor under the temperature sensor (b) and now lift the plate straight up and out of the oven space (c).

You must **inspect and clean all the removed oven parts as well as the oven bottom part** with a scraper to remove all big and small particles for best washing results. If there are burned hard particles attached to the parts, proceed to scrape them using a metal scraper, since the detergent have a hard time to dissolve such particles and may risk blockage of the drain outlet.

Before to proceed to place all the parts back in the oven, make sure any particles present in the door gasket seal and the inside side of the main door are totally removed. If there are food residues over the gasket surface or the door surface water leakage may appear and the gasket life will be decreased dramatically, proceed to clean the surfaces with a piece of clean dry paper to remove any food particle and/or grease.

<u>^</u>

ALWAYS REMOVE ANY PARTICLE FROM THE DOOR GASKET

Avoiding to thoroughly clean the door gasket seal and door contact surface will produce water leakage during the washing function as well as destroying the sealing properties of the gasket.



Figure 27 — Clean any residues, food particles or grease, on the door seal gasket as well as the inside door panel.

Finally, proceed to put back all the removed parts in the oven following the reverse order that they were removed. Note that to fully close and lock the main door you may need to push hard on the front of the door and with a little bit of speed. Now the oven is ready to run the washing function.



Inspect the oven air filter regularly, please read Section 11.2, for more information.

9



Mandatory to use ECOLAB® MIP SMX detergent, ECOLAB® Trump XL(UK), KERSIA Deptal K, J Diversey VC82 Super Quest

<u>^</u>

Using any other detergent will void warranty

Using other type of detergent must be tested in advance by Eatgood!

Detergents producing too much foam will activate the main fan motor protection and the oven will activate an internal motor protection and display will show an error. In case of motor fan protection error call a service technician in order to reset the fan motor protection.

Contact your distributor before using any other type of detergent.

The oven must be washed daily after cooking!

Avoiding to perform the proper wash cycle will compromise the cooking quality as well as shorten the machine life time.

The dishwasher function must be ran every day when the machine has been used for cooking, regardless of how much it has processed during the day. This is very important because the dishwasher and the dishwasher detergent must be given the best chance to remove dirt while the oil, fat, grease or particles are still soft and not burned.

It is not recommended to use the oven without running the washing because the dirt, grease and oil will burn and it will stick harder to the oven chamber making it more difficult to be removed with the normal washing function.

The wash functions are enabled only if the oven temperature is lower than 80°C (176°F), therefore run the cool down function to reduce the oven temperature if need it.



Figure 28 – Washing screen menu

To access the wash functions press the Wash button in the main screen, then the wash menu screen will be shown as displayed in Figure 28.

9.1 Starting the diswashing function



- ✓ Always check the detergent canister level before starting the washing function.
- Please be aware of detergent safety handling procedures and protecting clothing, read the safety data sheet for how to handle the detergent.



For optimal washing results, make sure there are no food particles inside the oven chamber, please read section 8 for more information.

To access the wash menu screen, see Figure 29, press the wash button in the main screen.



Figure 29 — Screen for selection of dishwasher program or rinse cycle

Note that if the **oven temperature** is **too high the dishwasher's buttons will be disabled**, marked with a red cross over the buttons. To enable the washing buttons, the cool down function must be used to bring the oven temperature to a lower value, check Section 7 - page 17 for more information regarding the cool down function.

There are three wash programs with different duration lengths and a quick wash rinse program. The washing function is performed automatically; the machine will inject the detergent liquid, run several wash cycles to finish with a water rinse cycle to remove any detergent residue.



It is recommended to run a 4h long program over night after the cooking

To run the washing function, press the desired wash button. The machine will automatically start the washing cycle, indicating the total washing remaining time, see Figure 30. After the dishwashing is finished, the machine will produce an audible beeping and a text will appear in the screen.



Figure 30 – Wash program running screen

10 💥 Machine Options

The machine is provided with additional functions present in the machine option screens, see **Figure 31**. You can access the empty basket menu in case that you need to run an extra empty cycle, open the main door, run the cool down function or get the machine information. Following subsections will describe briefly each function button.

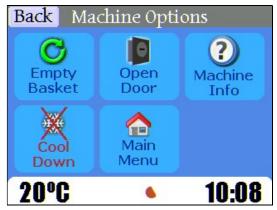


Figure 31 – Machine options screen



Be aware that if the auto-empty function is enabled, the basket will automatically rotate 2 seconds after the basket is pulled out.

This function can be used if there is still some food left in the basket. You can access this function by pressing the empty basket button, then the empty basket screen will be shown, see Figure 32.

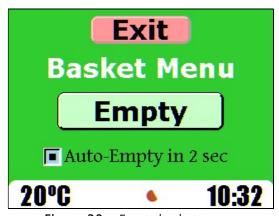


Figure 32 – Empty basket screen

10.2 Den door

This function is used to open the main door in case that you need to get access to the oven internal parts. Before you open the main door, you need to pull out completely the food basket container first.



Remember to properly clean the door gasket seal from particles and grease before closing the door.

The machine info screen display the machine model, serial number and software version. This information should be always used when you contact the machine distributor or the technical service.

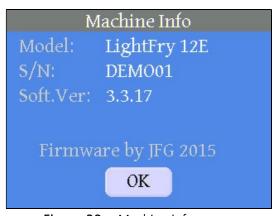


Figure 33 – Machine info screen

10.4 Cool down

The cool down function is explained in detail in Section 7 page 17.

BEFORE SHUT DOWN, ALWAYS RUN COOL DOWN PROGRAM BEFORE TURNING OFF THE POWER. THIS TO AVOID TRIGGING THE MECHANICAL OVERHEAT PROTECTION, TO AVOID DOWN TIME!

11 Service and Maintenance

11.1 Important daily inspection and operation

Run the dishwasher every day when the oven has been in operation and has processed food. You can choose among 1, 2, or 4-hour washing programs depending on how dirty the oven is. It is recommended to run a 4-hour washing program during the night time if possible.

11.2 Inspecting and cleaning the Air Filter

Pull the basket completely out of the oven space and press in the spring locks to completely release the basket. Set the on/off button to *ON* to start the machine and power the display, wait until the following screen comes up and press *Options*. Press the *Open Door* button; the following screen will come up.

The air filter is located below the oven space, see Figure 34. There are two holes on the air filter. Use these as handles to grab the filter and pull it completely out. Wash the air filter in a dishwasher and reinsert it again or, alternatively, insert a spare air filter (additional accessory) to prevent any halts in production.



Figure 34 - Air filter partially pulled out

Once the air filter is in place again, push the door closed until it locks with a click. Put the basket back into the oven space. You can now resume production or, alternatively, turn off the machine.

12 Troubleshooting



An error screen will be shown and the unit will be automatically stopped, in case of a malfunction is detected.

Turn off or disconnect the appliance from the power supply and have the unit to be serviced by a qualified technician.



It is a good practice to take a picture of the Lightfry screen and send it to your technical partner for better assistance.

There are a number of error codes that may appear in the display due to some type of unit malfunction. If an error is triggered, the machine will stop immediately and the error description will be shown, you must contact your machine qualified technician for further assistance.

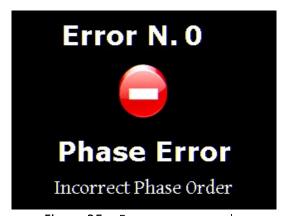


Figure 35 – Error screen example.

A typical error screen is shown in Figure 35, and the following table covers a basic description for all the most common machine errors.

Num.	Description	Action
0	Incorrect phase order	Contact your technical service in order to adjust the correct incoming phase order.
1		Missing power in Phase 1, contact your technical service partner.
2	Phase L2 not detected	Missing power in Phase 2, contact your technical service partner.

Num.	Description	Action
3	Phase L3 not detected	Missing power in Phase 3, contact your technical service partner.
5	Heating safety protection activated	The mechanical heating safety protection is activated, oven reached over 300 °C (572 °F). IMPORTANT: Do not switch off the unit without running the cool down program. - Heat safety protection must be reset by a technical service partner.
6	FAN protection activated	 The main FAN motor protection is activated due to a blockage in the FAN blades. Inspect for blockage of the main fan blades. Check for foam formation during the washing program, if necessary replace detergent type. FAN protection must be reset by a technical service partner.
20	Drain valve error 1	Malfunction in the Drain system Inspect the drain system glass fuse Check and/or replace drain valve motor/sensor, done by a technical service partner.
21	Drain valve error 2	Malfunction in the Drain system Inspect the drain system glass fuse Check and/or replace drain valve motor/sensor, done by a technical service partner
22	Drain error	Drain line/system clogged. Check the following for free ways for evacuation of water: - Drain hose from the Lightfry unit - Drain pipes in the building - Drain elbow in the Lightfry unit. Login to open drain valve to clean it. If water inside the Lightfry unit, be prepared to collect it once the blockage of the water is removed with a bucket orowl.
30	Basket rotation error	Malfunction in the basket rotation system. Inspect the basket rotation glass fuse. Check that the basket can freely move Check and/or replace drain valve motor/sensor, done by a technical service partner
40	Main door switch error	Malfunction in the door switch Inspect the door switch function Check and/or replace switch sensor, done by a technical service partner
50	Target temperature too high	The target temperature is too high. - Check the cooking program temperature values - Inspect temperature sensors, done by a technical service partner.

Num.	Description	Action
		- Check/replace the main CPU board, done by a technical service partner.
60	Oven temperature too high	Oven temperature too high Check temperature sensor function Check for blockage in the air ventilation paths.
70	Water leakage	Water leakage detected inside the oven cabinet Check the leakage sensor and install a new expansion sponge
80	Temperature sensor 0 not detected.	Malfunction in the temperature sensor 0 Change and/or replace the temperature sensor 0
81	Temperature sensor 1 not detected.	Malfunction in the temperature sensor 1. Change and/or replace the temperature sensor 0
90	Pressure sensor not detected	Malfunction in the oven water pressure sensor. - Check and/or replace pressure sensor - Inspect pressure sensor electrical connections. Move out the pressure sensor cable from motor/power cables.
91	Filling water timeout	 Water pressure missing or too low. Inspect the water valve glass fuse. Check incoming water pressure system Increase the filling timeout value, done by a technical service partner. Check/replace water valve or pressure sensor, done by a technical service partner.
93	Pressure sensor has passed its upper pressure limit	Malfunction in the oven water pressure sensor. - Inspect drain system - Check and/or replace pressure sensor - Inspect pressure sensor electrical connections. Move out the pressure sensor cable from motor/power cables.
120	Temperature too high in the oven electrical cabinet	The temperature inside the electrical compartment is too high. - Inspect the air filter for blockage. - Decrease the outside temperature; remove any heat source close to the unit ventilation air intake - Inspect the ventilation fan motor function, done by a technical service partner.

12.2 Most common problems

The most common problems will be listed in this section, ask your machine supplier or technical partner for other type of problems not listed.

12.2.1 Product cooking quality difference

If the product doesn't become crispy or the quality is different, check the following steps:

- Check that you have chosen the right product, amount of product, to the right cooking program.
- ✓ Product quality may change between seasons, check the bag for manufacturing date and compare it to the previous one. Contact your food producer.
- ✓ Inspect the grid fan protection of the air guidance plate, sometimes food particles may collect in the grid and restrict the airflow and altering the cooking process.
- ✓ Inspect if the ventilation filter is clean and air can circulate inside the machine.
- ✓ Inspect that the exhaust chimney is not blocked and exhaust vapours can circulate freely. Never connect a ventilation system directly to the chimney.

12.2.2 Oven not clean after washing program

If the oven doesn't became clean after washing, check the following steps:

- Clean the oven daily, if the washing is not done daily, the cleaning function will be not optimal. Manual cleaning must be performed to remove the hard burned parts.
- ✓ Check if there is enough detergent fluid in the canister.
- ✓ Check if detergent is flowing correctly towards the machine. Perform a bubble test by activating the detergent pump and allowing some air to flow in the detergent hose shortly so an air bubble enters the system and you check for correct movement of detergent fluid.
- Check that the detergent pick-up hose end is placed in the bottom of the detergent canister and no air is allowed to enter the detergent system.
- ✓ Inspect the detergent pump function. Inspect electrical connections and/or glass fuse protection. Done by a technical service partner.

12.2.3 Water leakage under the machine

Some water leakage may appear under the machine due to leakage from the main door gasket, check the following steps:

- ✓ <u>IMPORTANT:</u> If a new gasket is installed, bring the oven up to working temperature and run some cooking programs to allow a proper fitting of the gasket against the door surface. If the gasket is not heated up, some leakage may appear in the first couple of washing cycles.
- ✓ Always clean the gasket and door gasket contact surface from food residues. Leaving some food residue or grease will produce water leakage. If food residue is left in the gasket and the oven is brought to temperature, permanent damage will be done to the sealing function of the gasket, and a new gasket will be required to be installed.
- ✓ Inspect the gasket quality, replace if too old or food residue has melted in the material.

If the machine is leaking from other places than the main door, contact your technical partner.

12.2.4 Activation of the over-heat safety protection

The machine has a mechanical overheat protection set to 300 $^{\circ}$ C (572 $^{\circ}$ C) and if that temperature is reached the heating elements will be electrically disconnected, a technical service partner must be contacted in order to reset the protection.

The most common way to activate this protection is done by switching off the machine right away after a cooking program or Autoheat is done. By doing so, the heat accumulated in the heating elements will trigger the protection due to a lack of air flow that distributes the heat in the oven chamber.

If this protection is activated you will need to let the oven temperature to cool down by open the main basket door, and then contact your technical service partner to reset the heat protection.