LightFry©
USA

Advanced User Manual

Models 12E, 12U and 18EHC

ENGLISH

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 AN 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.

Table of contents

Table of contents 4
1 Important information 6
2 How to enable advanced machine functions 8
3 Adjusting machine status time 11
4 Cooking program editor 12
5 Machine service functions 15
5.1 Machine extra functions 16
5.2 Machine outputs 16
5.3 Machine inputs 17

1 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, 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 globes 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 inside the oven chamber.

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

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

Performing the 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 used 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.

2 How to enable advanced machine functions

> *This functions should be used only by trained personal, improper use of this functions may result in machine damage or personal injury.*

In the LightFry unit, you can create or modify the cooking program and access extra functions. You must log in with a password to access the extra functions, since by default they are disabled.

You can enable the extra functions pressing *Options* in Main menu screen, see **Figure 1**, and then press *Machine Info* button, in Figure 2.

Figure 1 – Press *Options* to access the editing function.

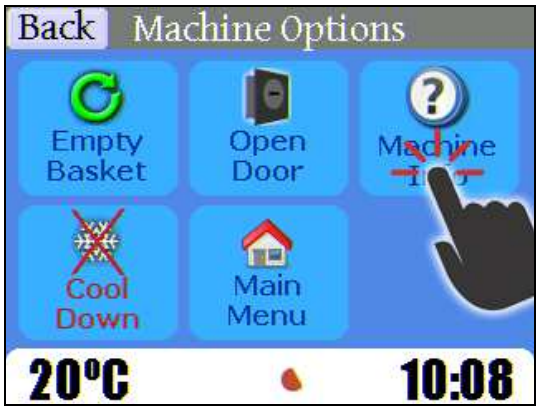

Figure 2 – Press *Machine Info* to proceed to the editing function.

In the Machine info screen, see Figure 3, press the bottom-right corner four (4) times to access the login page, notice that a dark blue square will appear, after that a new icon named User Access will appear in the machine option screen, click it to input the access password, see Figure 4.

Figure 3 – Click 4 times in the bottom right corner.

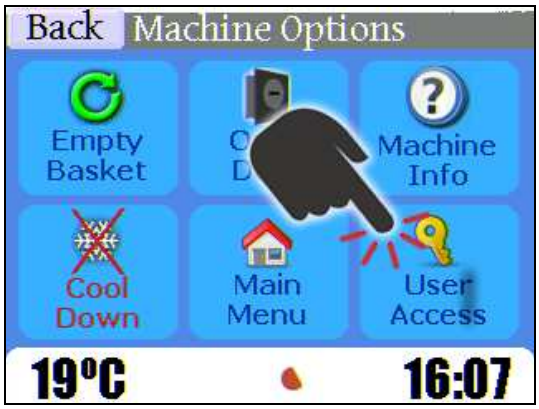

Figure 4 – Click on **User Access**.

Enter the password **"HOLA"** and press *OK*. If everything was typed correctly a new button named More will appear in the Machine Options screen, see Figure 6, that will give you access to the machine extra functions.

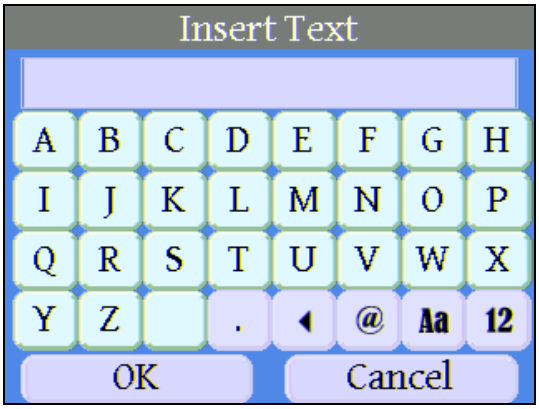

Figure 5 – Enter the password and press *OK*.

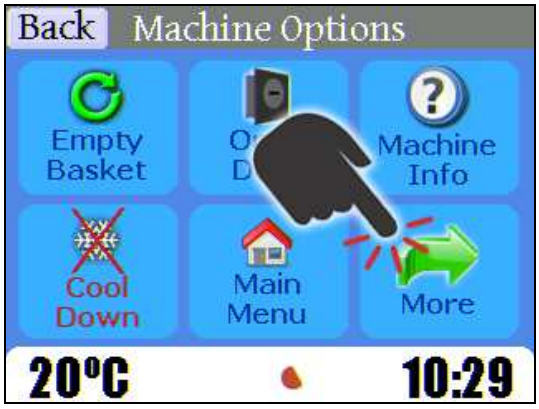

Figure 6 – More button active after log in.

If the "**more**" button is pressed the extra function screen will be shown, see Figure 7, were you can access different machine extra functions, which will be explained in more detail in the following sections.

Figure 7 – Machine advanced option screen.

Screen Information

This screen shows the advanced machine functions.

- *Functions*: access to the machine function screen.
- *Output*: access the machine outputs screen
- *Inputs*: access to the machine input screen
- *Edit*: access to the cook program editor
- *Main Menu*: direct access to the main menu.
- *Logout*: Exit the advanced machine functions.

The **Back** button will return to the previous screen

3 Adjusting machine status time

The machine time that is displayed in the status bar can be changed in case of daily time adjustments or machine deliver to a different time zone.

To edit the machine time you will have to access the machine advanced option screen, see Figure 8, then in that screen you will need to **click the time text** in the status bar, then the screen in Figure 9 will be shown so you can type the correct time value.

Figure 8 – Machine advanced option screen.

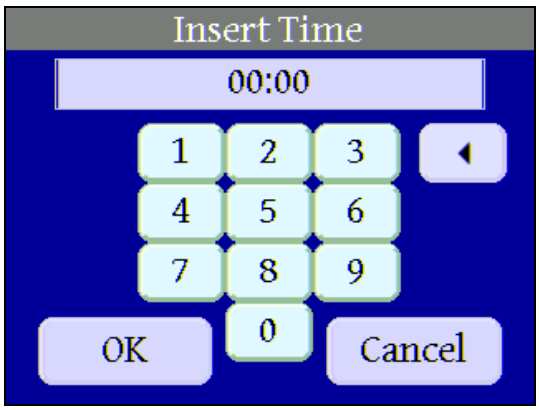

Figure 9 – Type the current time and click OK button, otherwise press cancel.

4 Cooking program editor

To modify or create a cooking program, first you will need to access the cooking program list by either pressing the "edit" button in Figure 7, or the "list" button present in the main cooking screen, then the program selection screen will be shown as seeing in Figure 10.

In order to select a program you want to modify/edit or find an empty program place, you can use the + (plus) or – (minus) buttons on the right or click directly on the desired program line to find the right program place, see Figure 10. Once you have marked the selected program that needs to be changed, press *Edit*, and the screen in Figure 11.

Figure 10 – Program list with an *Edit* button enabled.

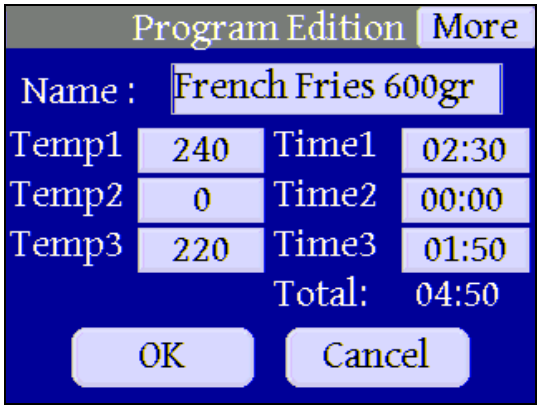

Figure 11 – Editing screen for creating new programs and modifying existing programs.

The oven is provided with a smart temperature controller that will try to regulate the oven space temperature to the desired value. Also there is a ventilation flap that allows fresh air inside the oven chamber, mostly to remove the steam and let the cooking product become crisp.

A cooking program can be configured using a set of **three cooking phases** where a target temperature and total cooking time can be configured independently.

- *Cooking Phase 1*: **Temp1** controls the temperature in the steam phase, in other words, in the phase where the food products are cooked. **Time1** indicates and controls the length of the steam phase in minutes and seconds. During this phase the ventilation flap is closed.
- *Cooking Phase 2:* **Temp2** controls target temperature that can be used for regulating a second steam phase, in this case if a different target temperature is needed during a cooking program. **Time2** indicates and controls the length of the steam phase in minutes and seconds. During this phase the ventilation flap is closed. In most of the standard cooking programs, this phase it is not used.
- *Cooking Phase 3:* **Temp3** controls the temperature in the crisp phase, which gives the products a surface and crispiness. **Time3** indicates and controls the length of the crisp phase in minutes and seconds. During this phase the ventilation flap is open, allowing fresh air.

Different food products need different steam phase lengths or may be no steam phase whatsoever; for example, when you cook onion rings. Please contact the machine supplier to obtain reference for different cooking program parameters.

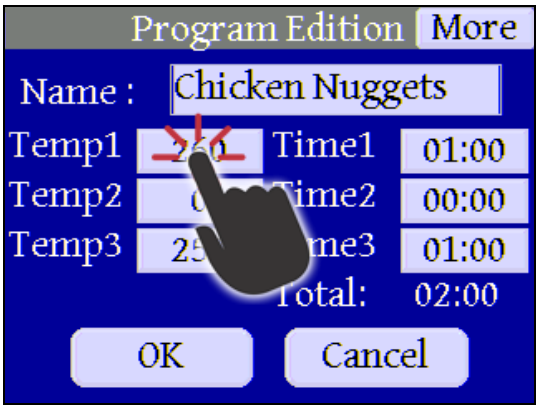

Figure 12 – Encircled temperatures and times that can be changed. Press the time and temp that you want to change.

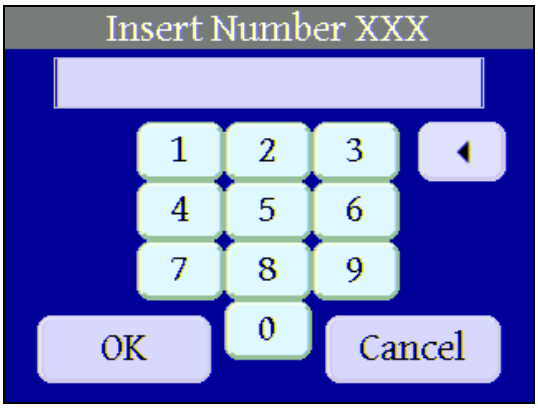

Figure 13 – Input screen during editing or programming of new programs, save with *OK.*

In order to modify an existing program parameter, you must touch one of the temperature or time buttons with your finger, see Figure 12. When you press your finger against a specified temperature, a dial from 0 to 9 appears where you can key in the new desired temperature. Select OK in accordance with Figure 13.

In order to edit the cooking program name, press your finger against the program name box and a new screen with the whole alphabet will come up see Figure 14. You can now change or write a new name as per your desire. Finish with *OK*. The space key is the button between "Z" and ".". Once you have saved the new program name, this name will automatically appear in the program selection list in the future.

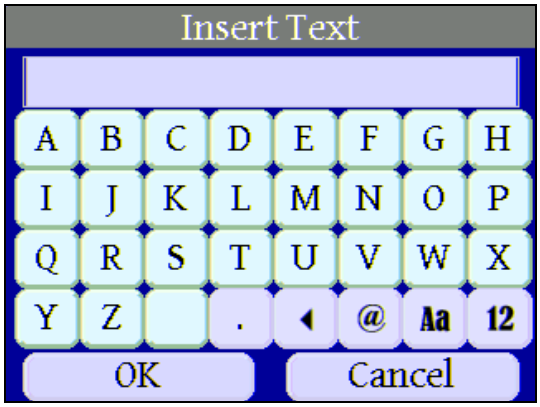

Figure 14 – Keyboard for input of program names

To access the *extra cook program parameters* you will have to press the **more button** present in the top right corner of the cook program editor screen, see Figure 12, then the following screen will be displayed

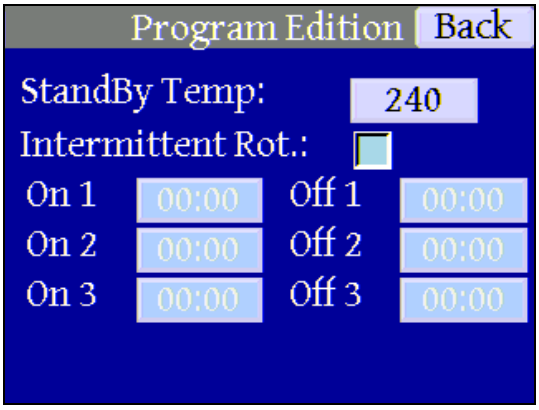

Figure 15 – Cook program advanced option.

Screen Information

- *StandBy Temp:* current oven temperature for autoheating and standby.
- *Intermittent Rot.*: Enable/disable the intermittent basket rotation functions.
- *On 1,2,3:* Time during the basket rotation is active.
- *Off 1,2,3:* Time during the basket rotation is disabled or turned off.

The **Back** button will return to the previous screen

The **Standby Temp** parameter sets up the *Autoheat target temperature* as well as the *standby temperature* that the oven will keep while the oven is in the cooking menu waiting to process the food products.

The **intermittent basket rotation** functions would allow you to program specific basket rotation patterns for food products that contain special coatings. To be able to modify the parameters, the check box must be selected.

The **On 1** parameter controls the total minutes-seconds that the basket will rotate during the steam phase 1, as well as the **Off 1** parameter controls the total minutes-seconds that the basket will be stopped, therefore not rotating. **On 2** and **Off 2** will control the same functions in the phase 2, as well as **On 3** and **Off3** for the crisp phase 3.

5 Machine service functions

This functions should be used only by trained personal, improper use of this functions may result in damage or injury.

These functions and screens are used to troubleshoot or test the different motors and sensor of the machine, be aware that the improper use of these functions can damage the machine and void the warranty; only service or trained personal should use these functions

Depending of the machine firmware version, the following screen may be different and some buttons will not be present.

The following functions are access from the machine extra function screen shown in Figure 16.

Figure 16 – Machine advanced option screen.

5.1 Machine extra functions

These functions are used to initialize or run specific machine functions.

To access the machine extra functions you will have to press the Function button present in Figure 17 so the machine extra function screen will be shown.

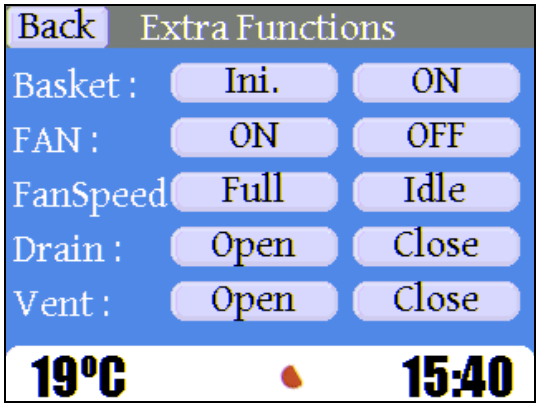

Figure 17 – Machine extra functions screen.

Screen Information

- ***Basket Ini:*** run initialization of basket position.
- ***Basket On:*** run continuously the basket rotation
- ***Fan On:*** turn on the air fan to max speed.
- ***Fan Off:*** turn of the air fan motor.
- ***FanSpeed Full:*** Turn on air fan at max speed.
- ***FanSpeed Idle:*** turn of air fan at idle speed.
- ***Drain Open:*** open the water drain valve.
- ***Drain Close:*** close the water drain valve.
- ***Vent Open:*** open the air food ventilation
- ***Vent Close:*** close the air food ventilation.

The **Back** button will return to the previous screen

5.2 Machine outputs

This screen is used to turn on/off all the motors, valves and outputs present in the LightFry unit.

To access the machine output functions screen you will have to press the ***Outputs button*** present in Figure 18, then the following screen will be shown.

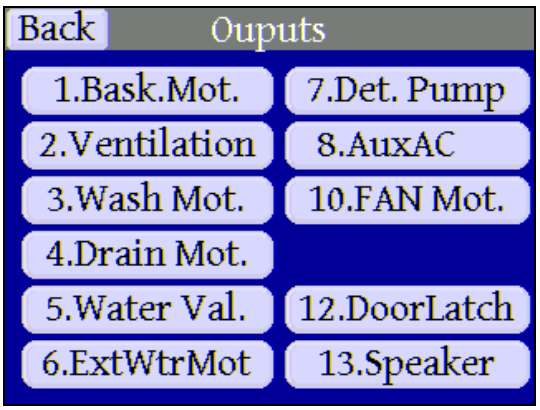

Figure 18 – Machine output screen.

Screen Information

- ***1.Bask. Mot.:*** basket motor
- ***2.Ventilation:*** Air oven food ventilation
- ***3.Wash Mot.:*** water washing pump.
- ***4.Drain Mot.:*** drain valve motor.
- ***5.Water Val.:*** incoming water valve.
- ***6.ExtrWtrMot:*** *-Currently not used-*
- ***7.Det. Pump:*** detergent pump motor
- ***8.AuxAC:*** *-Currently not used-*
- ***10.FAN Mot.:*** food chamber *air fan motor*
- ***12.DoorLatch:*** main door lock latch.
- ***13.Speaker:*** acoustic speaker.

The **Back** button will return to the previous screen

5.3 Machine inputs

This screen displays the status of the different input sensors present in the machine.

To access the machine input functions you will have to press *Inputs button*, present in Figure 19, then the following screen will be shown.

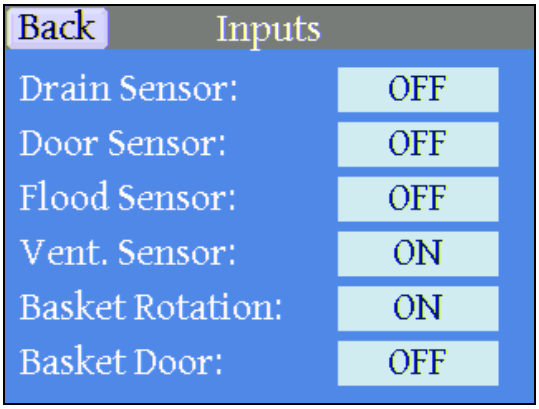

Figure 19 – Machine inputs screen.

Screen Information
This screen shows the input sensor information; the text will change between on and off depending on the sensor status. The **Back** button will **return** to the previous screen