XYZ Corp.

## Fry Controller FC-1234

# **Operating Manual**

Revision D



Copyright 2014 Brian Dunn — BD Tech Concepts LLC

### Contents

Introduction		1
Idle		1
Cooking Cycle		<b>2</b>
Displaying and Selecting Presets		<b>2</b>
Editing a Preset		3
Clearing the Counter		3
Power Loss	1 Jul	3
Error Conditions	tis 1	4
Introduction	CEX.	

The FC-1234 provides a flexible, intelligent electronic control for the pressure fryer unit. Up to nine recipes with time and temperature may be stored in presets, ready to be selected with a few button presses. The display indicates the chosen preset and whether the oil is at the correct temperature.

Cooking starts as soon as the unit is closed, and the display shows the temperature and the remaining time. An auto-compensation function is available to slightly adjust the cooking time according to the current temperature of the oil.

When the cooking cycle is complete, an alarm sounds to alert the user to open the unit and remove the food. A counter increments each cycle to help keep track of when to filter or change the oil.

Error conditions are monitored, and when the occur they are logged for future recall to assist a technician in correcting any problems.

 $\triangle$  WARNING: Add oil to the vat before turning on this unit! Operating the unit without oil in the vat will lead to an error condition.

## Idle

#### $\triangle$ WARNING: Before turning on the unit, be sure that the vat has oil, and the value is open.

When power is turned on, the unit selects the last-used preset and begins to heat the oil to the correct temperature for that preset. The heater indicator  $\iiint$  lights up whenever the heater is being used.

If the oil temperature isn't ready yet, the display will alternate between:

- **EEEE** with the preset's desired temperature.
- **BBB** or **BBB** with the current temperature.

**BEFE** will be whichever preset was last used, 1-9.

Once the temperature is correct for the selected preset, the display changes to **BHB BBB**.

## **Cooking Cycle**

#### To cook some food:

- 1. Add the food to the vat and close the lid.
- 2. The unit immediately starts counting down the timer. The valve-closed indicator a lights to indicate that the lid is closed.
- 3. Once the cooking cycle is complete, the display flashes **HBB** and beeps the speaker.
- 4. Open the lid to and remove the food immediately, as it continues to cook as long as it is in the oil, even if the timer has completed.
- 5. Once the lid is opened, the unit returns to the idle display.
- 6. The counter # increments by one each cycle. This counter may be used to keep track of when to filter or change the oil.

The auto-compensation  $\bigcirc^{*}$  setting tells the unit whether to modify the cooking time depending on the current oil temperature. When this setting is turned on, the cooking time will be shorter if the oil is hotter, and longer if the oil is cooler. When this setting is turned off, the cook time will be exactly what the preset calls for, no matter what the current oil temperature may be.

#### **Displaying and Selecting Presets**

To view the settings for the current preset: While the unit is idle, press Select 🖉. After five seconds, the unit returns to idle.

To view a different preset's settings: Press a key (1 - 9). Press Cancel  $\otimes$  or wait five seconds to return to the current preset.

To cook with a different preset: Press a key (1 - 9), then press Select  $\checkmark$ . The unit returns to idle with the newly selected preset on the display.

**Note:** Different presets can have different oil temperature settings, so the unit may have to heat or cool for a while to be in the ready temperature range for the new preset. If the auto-compensation  $\bigcirc^{\bullet}$  function is turned on for the new preset, the unit should be able to cook correctly even though the oil might be too hot or cool.

#### **Editing a Preset**

#### To change a preset's settings:

- 1. Hold a key (1) (9) for five seconds. The speaker beeps and the unit flashes the time for the selected preset.
- 2. Enter a new time. The display is solid while entering a new time. Press Select 🖉 when finished entering the new time.
- 3. The display now flashes the new time which you just entered. Press Select 🖉 to accept this new time.
- 4. The unit begins flashing the temperature. Enter a new temperature and press Select 🕑 to finish entering the new value.
- 5. The display now flashes the new temperature which you just entered. Press Select  $\checkmark$  to accept this new temperature.
- 6. The unit begins flashing either **BBB BBB** or **BBB BBB** along with the auto-compensation indicator ③<sup>+</sup> **↓**.
  - (a) Press (0 9) to toggle auto-compensation on/off.
  - (b) Press Select  $\checkmark$  when finished.
- 7. Finally, the unit flashes all three settings at once. Press Select 🖉 to accept the values and return to idle.

#### Notes:

- The unit returns to the preset which was last used, not necessarily the one which you just edited.
- At any time, the Cancel  $\bigotimes$  key may be used to cancel editing and return to idle with no changes.
- Likewise, if no key presses are seen for 25 seconds, the unit returns to idle without any changes.
- No preset is actually changed unless the final 🖉 key is pressed while all the new values are flashing at once.

#### Clearing the Counter

To reset the counter: After filtering or changing the oil, hold the Cancel  $\otimes$  key for ten seconds to reset the counter # to zero.

#### Power Loss

When the unit loses power, food continues to cook in the vat of hot oil even though the timer is not counting down. For this reason, if the lid is still closed when power is restored to the unit, the cooking cycle in progress must be canceled. The unit will sound an alarm and the display will alternate between **BBB** and **BBB** and **BBB**. Open the lid and discard the food. The unit returns to idle. Depending on how long power was out, the unit may have to heat the oil for a while to return it to the ready temperature.

## **Error Conditions**

The unit watches for several kinds of problems, and will sound an alarm and display an error code if it senses that something has gone wrong. Contact the manufacturer at (111) 111-1111 if your unit has recurring problems.

Error	Code	Action
8888	11	The heater does not seem to be working. With gas models, be sure that the gas is turned on.
8888	12	The oil did not get hot enough. Is there too much frozen food in the vat?
8888	21-23	Problem with the temperature sensor. $\triangle$ Stop using this unit, call for service.
8888	31	Oil temperature is too high. Is there enough oil in the vat? $\triangle$ WARNING: Turn off the unit and let it cool for a while.
41-43 Problem with the temperature probe. Δ Stop using this unit, call for service.		