

# GM 2000 Lane Controllers

## Operation Manual



# **Frymaster**<sup>®</sup>



Frymaster, a member of the Commercial Food Equipment Service Association, recommends using CFESA Certified Technicians.

[www.frymaster.com](http://www.frymaster.com)

**24-Hour Service Hotline**  
**1-800-551-8633**

02/2025



## **NOTICE TO OWNERS OF UNITS EQUIPPED WITH CONTROLLERS**

### **U.S.**

**This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: 1) This device may not cause harmful interference, and 2) This device must accept any interference received, including interference that may cause undesired operation. While this device is a verified Class A device, it has been shown to meet the Class B limits.**

### **CANADA**

**This digital apparatus does not exceed the Class A or B limits for radio noise emissions as set out by the ICES-003 standard of the Canadian Department of Communications.**

**Cet appareil numérique n'émet pas de bruits radioélectriques dépassant les limites de classe A et B prescrites dans la norme NMB-003 édictée par le Ministre des Communications du Canada.**



## **GM2000 Lane Controller**

### **Table of Contents**

|     |  |     |
|-----|--|-----|
| 1.1 | Overview-Multi-Product Mode                      | 1-1 |
| 1.2 | Overview-Dedicated Mode                          | 1-2 |
| 2.1 | Programming New Menu Items in Multi-Product Mode | 2-1 |
| 2.2 | Assigning Products to Menu Keys                  | 2-2 |
| 2.3 | Changing Menu Items In Dedicated Mode            | 2-2 |
| 2.4 | Default Menu                                     | 2-3 |
| 3.1 | Controller Setup                                 | 3-1 |
| 3.2 | Controller Codes                                 | 3-1 |
| 4.1 | Error Messages and Display Problems              | 4-1 |

# 1.1 Overview – Multi-Product Mode (5050)

## Overview – Multi-Product Mode (5050)

**Lane Keys**  
Press to initiate cook cycle. PROD appears in left display; press a menu key immediately after pressing the cook key to launch a cook cycle for the chosen product. Lane keys are also used to move through programming steps. Press the right arrow ► key to advance. Press left arrow ◀ key to go back.  
**NOTE: The “Lane 2” key is disabled for cooking when setup for two-lane.**

**Temperature Key**  
Press once for current temperature, twice for setpoint: 350°F(177°C).

**Checkmark Key**  
With controller off, used to enter and confirm programming modes.

**Status Indicator**  
Displays OFF when fryer is off, dashed lines when fryer is at setpoint. Displays HI, LO and HOT when the fryer is out of temperature range.

**Heat LED**  
LED is illuminated when the fryer is heating.

**Menu LED's**  
LED's above menu keys are illuminated when the product is cooking; flash to indicate holding time.

**ON/OFF**

**Menu Keys**  
Press a menu key immediately after pressing a lane key to launch a cook cycle for the desired product. The keys are also used to enter names of products. Each key, when repeatedly pressed, accesses multiple letters or symbols. See example below.

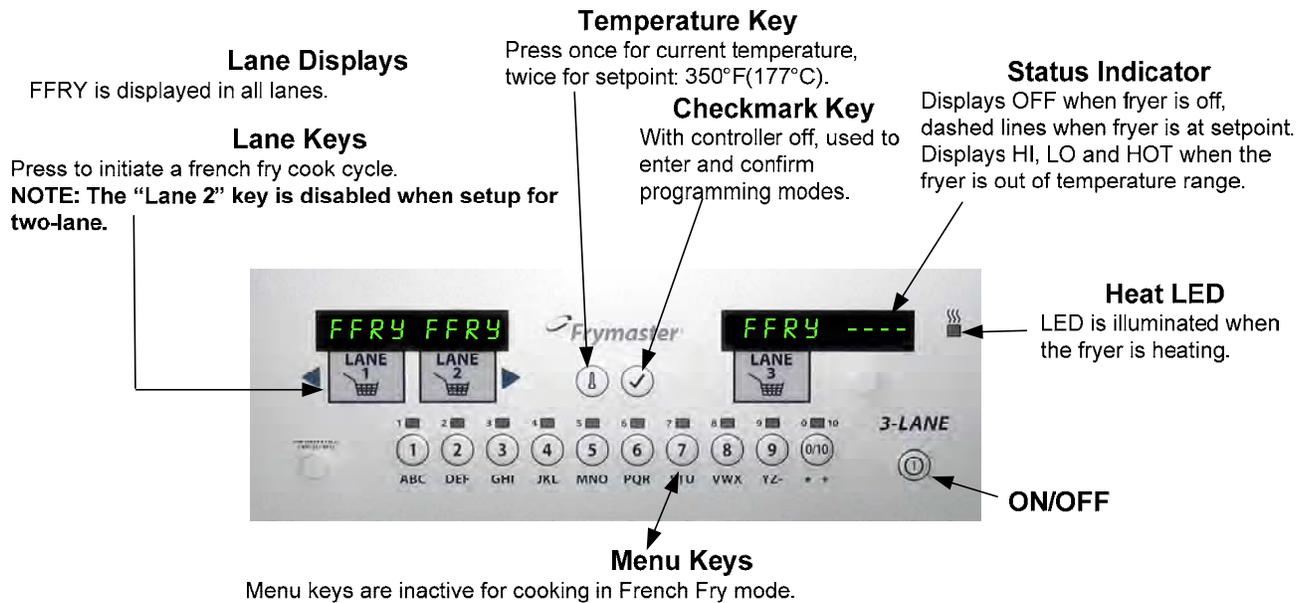
1 2 3 4 5 6 7 8 9 0  
 ABC DEF GHI JKL MNO PQR STU VWX YZ \* blank space + 0

| Turn Fryer ON   |   | Basic Operation |                    |
|---|---|-----------------|--------------------|
| 1: OFF appears in status display when controller is off.  | 1 |                 |                    |
| 2: Press ON/OFF key.  | 2 |                 |                    |
| 3: -LO- appears in status display. If melt cycle is enabled, MLT-CYCL will appear until temperature is over 180°F (82°C).                       | 3 |                 |                    |
| 4: Dashed lines appear in the status display when the fryer is at setpoint.   | 4 |                 |                    |
| <b>Launch Cook Cycle</b>  |   |                 |                    |
| 1. Press a lane key.  | 1 |                 | 5                  |
| 2. PROD appears in the window above the pressed button. (An alarm sounds if a menu key is not pressed in five seconds.)                         | 2 |                 | 6 Shake the basket |
| 3. Press the menu key for the desired product.  | 3 |                 | 7                  |
| 4. The display changes to the cooktime for the product and then alternates between remaining cooktime and the product name.                     | 4 |                 | 8                  |
| 5. SHAK is displayed if a shake time was programmed.  |   |                 |                    |
| 6. Shake the basket. The alarm automatically cancels.   |   |                 |                    |
| 7. DONE appears at the end of the cook cycle.   |   |                 |                    |
| 8. Press Lane key to eliminate DONE display and silence the alarm.  |   |                 |                    |
| 9. Hold time is indicated by a flashing LED over the menu key. Press the key to display remaining time.   |   |                 |                    |
| 10. LED flashes faster and an alarm sounds at the end of the hold timer countdown. Press the menu key under the flashing LED to halt the alarm. |   |                 |                    |

**NOTE:** To halt a cook cycle, press and hold the lane key under the displayed item for about five seconds.

# 1.2 Overview – Dedicated Mode (5060)

## Overview – Dedicated Mode (5060)



### Basic Operation

#### Turn Fryer ON

- 1: OFF appears in status display when controller is off.
- 2: Press ON/OFF key.
- 3: -LO- appears in status display. If melt cycle is enabled, MLT-CYCL will appear until temperature is over 180°F (82°C).
- 4: Dashed lines appear in the status display when the fryer is at setpoint.

---

#### Launch Cook Cycle

- 1: FRY appears in all lanes.
- 2: Press a lane key.
- 3: The display changes to the cook time for the fries, alternating with FFRY.
4. SHAK is displayed if a shake time was programmed.
- 5: Shake the basket. The alarm automatically cancels.
6. DONE appears at the end of the cook cycle.
- 7: Press Lane key to eliminate DONE display.
- 8: Display alternates between FFRY and hold timer countdown.

**NOTE:** To halt a cook cycle, press and hold the lane key under the displayed item for about five seconds.

## 2.1 Programming New Menu Items in Multi Product Mode

Follow these steps to enter a new product in the controller. The actions to be taken are in the right column; the controller displays are shown in the left and middle columns.

| Left Display   | Right Display  | Action  |
|--|----------------|---|
|  | OFF            | Press ✓   |
| CODE   |                | Enter 5050 with numbered keys.  |
|  | OFF            | Press ✓   |
| CODE   |                | Enter 1650 with numbered keys. Press the right arrow ► key to advance. Press left arrow ◀ key to go back.   |
| FRNCHFRY   | YES            | Press the right arrow ► key to advance to desired product. Press left arrow ◀ key to go back.   |
| Product to be changed or open position                   | Number and Yes | Press ↓ .   |
| Product name with cursor flashing under first character. | Edit           | Enter first letter of new product with numbered key. Press until desired letter appears. Press the right arrow ► key to advance cursor. Repeat until eight-letter or less name of product is entered. Eliminate characters with 0 key.                    |
| New product name   | Edit           | Press ↓ .   |
| Position number or version of previous name.             | Edit           | Enter four-letter abbreviated name, which will alternate with the cook time display during cook cycles.   |
| Abbreviated name   | Edit           | Press ↓ .   |
| Full name  |                | Press ✓.  |
| SHAK(E) 1  | A :30          | Press ↓ to toggle between M (manually cancelling alarm) and A (automatically cancelling alarm). Enter time in the cook cycle to shake the basket with the numbered keys.  |
| SHAK(E) 1  | Your settings  | Press ✓.  |
| SHAK(E) 2  | A :00          | Press ↓ to toggle between M and A. Enter the time in the cook cycle to shake the basket a second time.  |
| SHAK(E) 2  | Your settings  | Press ✓.  |
| COOKTIME   | M 2:45         | Enter cook time in minutes and seconds with numbered keys. Press ↓ to toggle between auto and manually cancelling alarm.  |
| COOKTIME   | Your settings  | Press ✓.  |
| HOLDTIME   | M :30          | Enter time product can be held after cooking. Press ↓ to toggle between auto and manually cancelling alarm.   |
| HOLDTIME   | Your Settings  | Press ✓.  |
| SENS   | 5              | Sens allows the fryer controller to adjust cooking times slightly, ensuring small and large loads cook identically. Setting the number to 0 allows no time adjustment; a setting of 9 produces the most time adjustment. Enter setting with numbered key. |
| SENS   | Your setting   | Press ✓.  |
| New Product  |                | <b>If a key assignment is needed:</b> press a menu key. Note: This eliminates any previous link associated with the chosen key. <b>Key not needed:</b> skip to next step  |
| New Product  | YES Key Number | Repeat steps starting at the top to enter additional products.  |
| New Product  | YES Key Number | Press Ⓟ (power key) to save changes and exit.   |
|  | OFF            |   |

## 2.2 Assigning Products to Menu Keys

| Left Display      | Right Display | Action  |
|-------------------|---------------|---|
|                   | OFF           | Press ✓.  |
| CODE              |               | Enter 1650 with numbered keys.  |
| Menu items        | YES           | Press the right arrow ► key to advance through menu items.  |
| Desired menu item | YES           | Choose and press menu key to associate with product.<br>Note: This eliminates any previous link associated with the chosen key. |
| Product name      | Number YES    | Press ⓐ (power key).  |

## 2.3 Changing Menu Items in Dedicated Mode

Follow these steps to change a product in the computer. The actions to be taken are in the right column; the computer displays are shown in the left and middle columns.

| Left Display   | Right Display | Action   |
|--|---------------|--|
|  | OFF           | Press ✓  |
| CODE   |               | Enter 5060 with numbered keys.   |
|  | OFF           | Press ✓  |
| CODE   |               | Enter 1650 with numbered keys. Press the right arrow ► key to advance. Press left arrow ◀ key to go back.  |
| FFRY   | YES           | Press ↓.   |
| Product name with cursor flashing under first character. | Edit          | Enter first letter of new product with numbered key. Press until desired letter appears. Press the right arrow ► key to advance cursor. Repeat until eight-letter or less name of product is entered. Eliminate characters with 0 key. |
| Product name   | Edit          | Press ↓.   |
| Previous abbreviated name.                               | Edit          | Enter four-letter abbreviated name, which will alternate with the cook time display during cook cycles.  |
| Abbreviated name   | Edit          | Press ↓.   |
| Full name  | YES           | Press ✓.   |
| SHAK(E) 1  | A :30         | Press ↓ to toggle between M (manually cancelling alarm) and A (automatically cancelling alarm). Enter time in the cook cycle to shake the basket with the numbered keys.   |
| SHAK(E) 1  | Your settings | Press ✓.   |
| SHAK(E) 2  | Your settings | Press ✓.   |
| SHAK(E) 2  | A :00         | Press ↓ to toggle between M and A. Enter the time in the cook cycle to shake the basket a second time.   |
| COOKTIME   | M 2:45        | Enter cook time in minutes and seconds with numbered keys. Press ↓ to toggle between auto and manually cancelling alarm.   |
| COOKTIME   | Your settings | Press ✓.   |
| HOLDTIME   | M :00         | Enter time product can be held after cooking. Press ↓ to toggle between auto and manually cancelling alarm.  |
| HOLDTIME   | Your Settings | Press ✓.   |

## 2.3 Changing Menu Items in Dedicated Mode cont.

| Left Display | Right Display | Action   |
|--------------|---------------|--|
| SENS         | 5             | Sens allows the fryer controller to adjust cooking times slightly, ensuring small and large loads cook identically. Setting the number to 0 allows no time adjustment; a setting of 9 produces the most time adjustment. Enter setting with numbered keys. |
| SENS         | Your setting  | Press ✓.   |
| FFRY         | YES           | Press Ⓚ (power key) to save changes and exit.  |
|              | OFF           |  |

## 2.4 Default Menu

This is the default domestic USA menu that is programmed into the controller. The international menu is programmed without times.

| Product Item #<br>Library &<br>Default<br>Button # | Menu Item               | 8 Character<br>Max Name | 4<br>Character<br>Name | Cook Temp<br>(programmed<br>in computer<br>set-up) | Cook<br>Time | Sensitivity<br>Setting | Shake<br>Time | Hold<br>Time |
|--|-------------------------|-------------------------|------------------------|--|--------------|------------------------|---------------|--------------|
| 1  | French Fries            | FRNCHFRY                | FFRY                   | 350° F/177° C                                      | 2:45         | 5                      | 30 sec        | 0            |
| 2  | French Fries            | FRNCHFRY                | FFRY                   | 350° F/177° C                                      | 2:45         | 5                      | 30 sec        | 0            |
| 3  | French Fries            | FRNCHFRY                | FFRY                   | 350° F/177° C                                      | 2:45         | 5                      | 30 sec        | 0            |
| 4  | Chicken<br>Nuggets      | CHICNUGG                | NUGG                   | 350° F/177° C                                      | 2.15         | 6                      | 30 sec        | 0            |
| 5  | Poppers                 | POPPERS                 | POPR                   | 350° F/177° C                                      | 3.00         | 4                      | 30 sec        | 0            |
| 6  | Chicken<br>Patty        | CHICPATY                | PATY                   | 350° F/177° C                                      | 3.00         | 4                      | 30 sec        | 0            |
| 7  | Shrimp                  | SHRIMP                  | SRMP                   | 350° F/177° C                                      | 3:15         | 3                      | 30 sec        | 0            |
| 8  | Onion Rings             | ONINRING                | ORNG                   | 350° F/177° C                                      | 3:00         | 4                      | 30 sec        | 0            |
| 9  | Chicken<br>Tenders      | CHICTNDR                | TNDR                   | 350° F/177° C                                      | 6:00         | 6                      | 30 sec        | 0            |
| 10   | Fish 3-1/2 oz<br>fillet | FISH                    | FISH                   | 350° F/177° C                                      | 3.25         | 7                      | 30sec         | 0            |
| 11 (Ded)   | French Fries            | FRNCHFRY                | FFRY                   | 350° F/177° C                                      | 2:45         | 5                      | 30 sec        | 0            |

| Button # | Menu Item |
|----------|-----------|
| 1        | FFRY      |
| 2        | FFRY      |
| 3        | FFRY      |
| 4        | NUGG      |
| 5        | POPR      |
| 6        | PATY      |
| 7        | SRMP      |
| 8        | ORNG      |
| 9        | TNDR      |
| 0/10     | FISH      |

### 3.1 Controller Setup

Follow these steps to prepare the controller for placement on a fryer:

| Left Display | Right Display        | Action   |
|--------------|----------------------|--|
|              | OFF                  | Press ✓.   |
| CODE         |                      | 1656 with numbered keys.   |
| GAS          | YES                  | Press ↓ to toggle between YES and NO. Leave at NO for electric fryer.  |
| GAS          | YES or NO            | With desired answer in place press ✓.  |
| 2 BASKET     | NO                   | Press ↓ to toggle between YES and NO. Leave at NO for three baskets.   |
| 2 BASKET     | YES or NO            | With desired answer in place, press ✓.   |
| SET-TEMP     | NOND 350             | Enter cooking temperature for non-dedicated items with the numbered keys; 350°F(177°C) is the default setting. |
| SET-TEMP     | Entered temperature. | Press ✓.   |
| SET-TEMP     | DED 350              | Enter cooking temperature for dedicated items with the numbered keys; 350°F(177°C) is the default setting.     |
| SET-TEMP     | Entered temperature. | Press ✓.   |
|              | OFF                  | None. Setup is complete.   |

### 3.2 Controller Codes

| Left Display | Right Display | Action  |
|--------------|---------------|---|
|              | OFF           | Press ✓   |
| CODE         |               | Enter <ul style="list-style-type: none"> <li>• 1650: Add or edit menus</li> <li>• 1656: Setup, change energy source</li> <li>• 3322: Reload factory default settings</li> <li>• 5000: Displays total cook cycles</li> <li>• 5005: Clears total cook cycles</li> <li>• 5050: Sets unit to multi-product</li> <li>• 5060: Sets unit to dedicated product</li> <li>• 1652: Recovery</li> <li>• 1752: Enable/Disable Boil Out</li> <li>• 1653: Boil Out</li> <li>• 1658: Change from F° to C°</li> <li>• 1655: Language Choice/Sound Level</li> <li>• 1753: Enable/Disable Melt Cycle (Once enabled, pressing “0” during melt will bypass melt cycle.)</li> </ul> |

## 4.1 Error Messages and Display Problems

| Problem  | Probable Causes   | Corrective Action   |
|--|---|---|
| <b>GM2000 display is in wrong temperature scale (Fahrenheit or Celsius).</b> | Incorrect display option programmed.  | GM2000 controllers may be programmed to display in either Fahrenheit or Celsius. Refer to page 3-1 for instructions on changing the display.  |
| <b>GM2000 display shows HI.</b>  | Fryer is 15°F (8°C) above setpoint.   | This display will appear only if the fryer is in the <i>non-dedicated</i> mode and the frypot temperature rises 16°F (9°C) or more above the programmed setpoint. This indicates a problem with the temperature control circuitry. Turn the fryer off and call FAS (Factory Authorized Servicer). |
| <b>GM2000 display shows HOT.</b>   | Frypot temperature is more than 410°F (210°C) or, in CE countries, 395°F (202°C).   | This is an indication of a malfunction in the temperature control circuitry, including a failure of the high-limit thermostat. Shut the fryer down immediately and call FAS.  |
| <b>GM2000 display shows –LO–.</b>  | Frypot temperature is between 180°F (82°C) and 315°F (157°C).   | This display is normal when the fryer is first turned on and may appear for a short while if a large batch of frozen product is added to the frypot. If the display never goes out, the fryer is not heating. Shut the fryer down and call FAS.   |
| <b>GM2000 display shows PROBE FAILURE.</b>                                   | <p>A. Problem with the temperature measuring circuitry including the probe.</p> <p>B. Damaged controller wiring harness or connector.</p> | This indicates a problem within the temperature measuring circuitry that is beyond the scope of operator troubleshooting. Shut the fryer down and call FAS.   |

| Problem  | Probable Causes   | Corrective Action   |
|--|---|---|
| <p><b>GM2000 display shows IGNITION FAILURE. Heating indicator is on, but fryer is not heating.</b></p>          | <p>A. Open drain valve</p> <p>B. Failed controller, failed interface board, open high-limit thermostat.</p> | <p>A. Press the ON/OFF switch off, verify that all drain valves are completely closed, then press the ON/OFF switch on.</p> <p>B. This indicates that the fryer is not heating. It is displayed if the fryer loses its ability to heat oil. It is also displayed when the oil temperature is above 450°F (232°C) and the high-limit thermostat has opened, halting the heating of the oil. If this does not correct the problem, call your FAS.</p> |
| <p><b>GM2000 display shows IGNITION FAILURE and alarm sounds, but fryer operates normally (false alarm).</b></p> | <p>Failed controller.</p>   | <p>Call FAS.</p>  |
| <p><b>Controller will not go into program mode or some buttons do not actuate.</b></p>                           | <p>Failed controller.</p>   | <p>Call FAS.</p>  |
| <p><b>Heat indicator off upon initial startup. Display shows HI or HOT with alarm sounding.</b></p>              | <p>Failed controller.</p>   | <p>Call FAS.</p>  |

©2025 Frymaster LLC. except where explicitly stated otherwise. All rights reserved. Continuing product improvement may necessitate change of specifications without notice.

Part Number FRY\_IOM\_8196945 02/2025

