M2000 Computer

Operation Manual

Frymaster

CFESA
Commercial Food Equipment Service Association

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

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

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Table of Contents

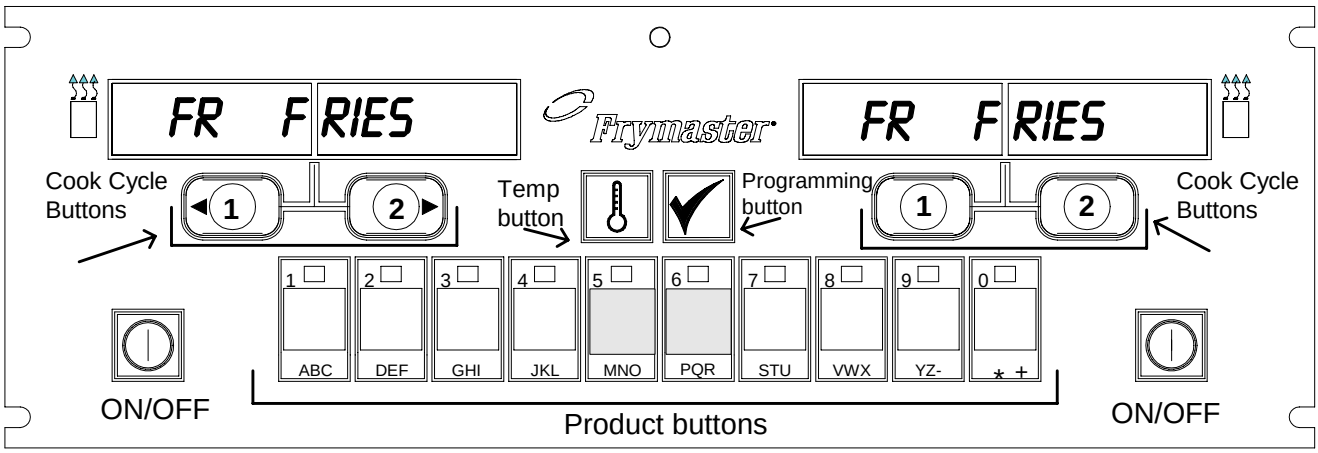
Overview 1-1

Quick Reference
- Basic Operation 2-1
- Cooking With Multi-Product Display 2-2
- Cooking With Dedicated Display 2-3
- Changing from Breakfast to Lunch 2-4
- Changing from Lunch to Breakfast 2-5

Computer Initial Setup/Language Selection 3-1
Programming Fry Station 4-1
Programming Multi-Product Fryer 5-1
Adding New Menu Items 6-1
Add Boil Out 7-1
Select Boilout 7-1

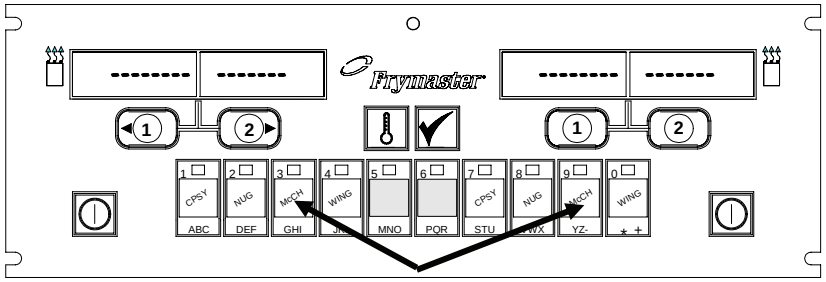
Programming and Test Codes 8-1
- Programming 8-1
- Set Up 8-1
- Recovery Check 8-2
- Loading Default Settings 8-2
- Choosing Sound Level, Language 8-3
- Change from Fahrenheit to Celsius 8-3
- Hi-Limit Check 8-4
- Moving Computer 8-5
- Distress Codes 9-1

M2000 Overview



1.1 General

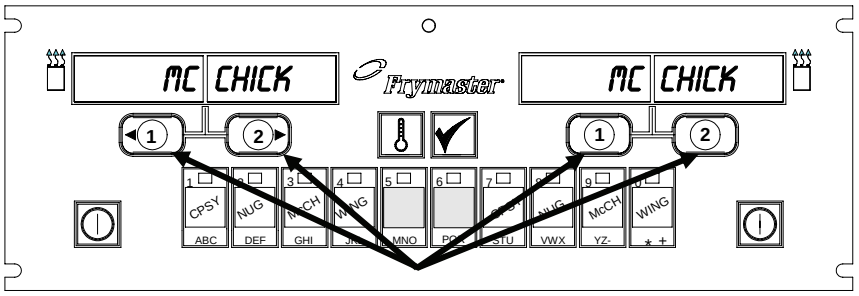
Welcome to the M2000, a computer that retains the one-button ease of the M100B and adds the utility of 40-product menu capability. The computer is easy to use. One button push starts a cook cycle for an item cooked in a dedicated vat. The same flexible computer on a multi-product vat requires only two button pushes to launch a cook cycle. Just choose a menu item on a product buttons and press, and then press a cook cycle button under the display showing the desired item. The computer can move seamlessly from McNuggets to Crispy Chicken to any added menu item.



Pressing product buttons 3 or 9 displays McChick.

In a typical store setting, the M2000s on the three-vat fry station display FR FRIES (shown above) and will launch a cook cycle with one push of a cook channel button.

On the chicken/filet station, the LED display shows dashed lines. To launch a cook cycle, press a product button and then press the cook cycle button that corresponds with the location of the dropped basket. By pressing the product button for McChicken, McChick will appear in the display. Just press the cook cycle button corresponding to the location of the appropriate dropped basket.



Pressing either cook cycle button under the McChick displays launches a cook cycle.

M2000 Overview

The M2000 will operate with electric and gas fryers, both full- and split-pot.

1.2 Service Information

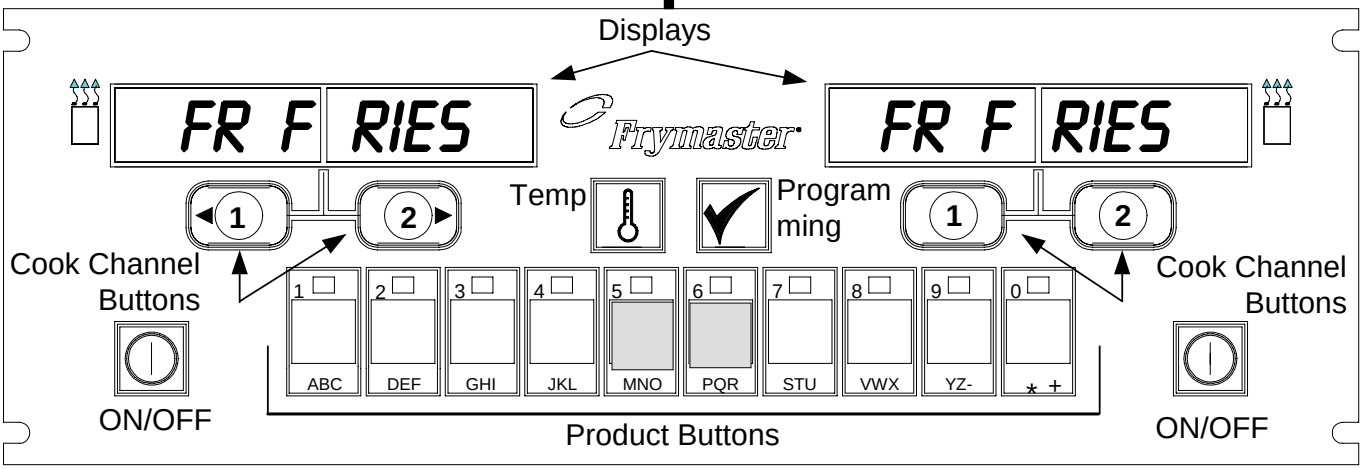
Call the "800" number on the cover of this manual for the location of your nearest maintenance & repair center. When requesting service assistance, always give the model and serial numbers of your cooking computer and the type of fryer this cooking computer is installed on.

To assist you more efficiently, the following information will be needed:

Model Number	_____
Serial Number	_____
Type of Fryer	_____
Nature of the Problem	_____

Any other information which may be helpful in solving your service problem.

Basic Operation



Turn Fryer ON

Press right key for full pot; press key on desired side on a split pot.

Turn Fryer OFF

Press right key for full pot; press key on desired side on a split pot.

Check Frypot Temperature

Press Temp key once. Displays show frypot temperatures.

Check Frypot Setpoint

Press Temp key twice. Displays show frypot setpoint temperatures.

Cancel Duty or Remove Alarm

Press key under active display.

Start One-Button Cook Cycle (Dedicated Mode)

Press key under display showing desired item.

Start Two-Button Cook Cycle (Multi-Product Mode)

Press product key bearing icon for desired product. Press cook channel button to begin cook cycle.

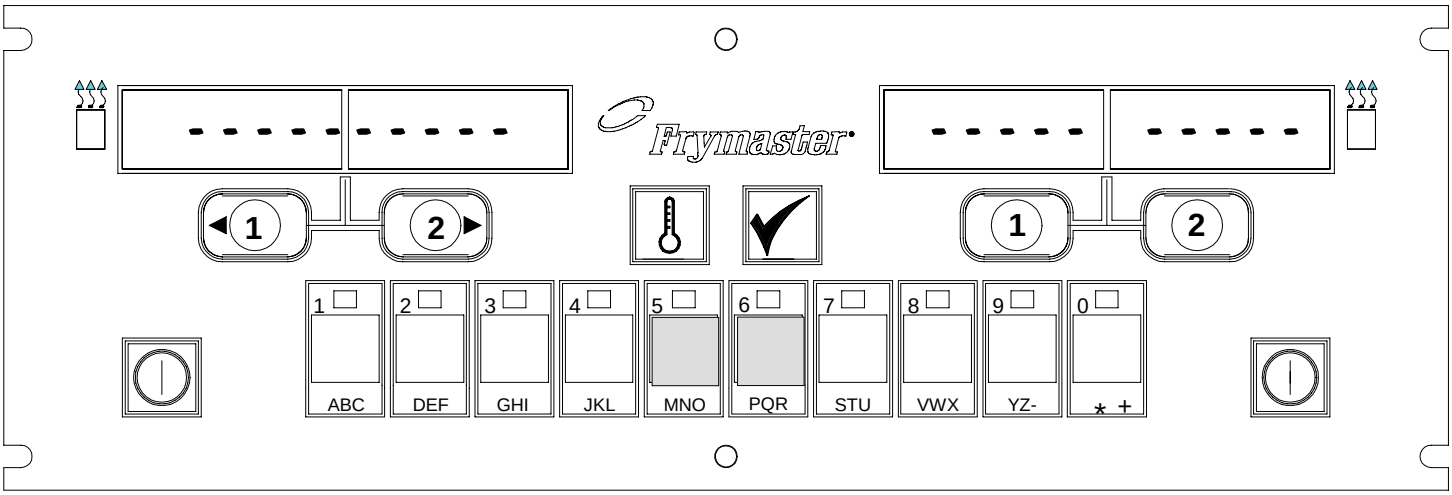
Change From Dedicated to Multi-Product Mode

Press Cook Channel button under displayed menu item for 5 seconds. Display changes to dashed lines.

Change From Multi-Product to Dedicated Mode

Press product key bearing icon for desired product. Press cook channel button under display showing desired item for 5 seconds.

Cooking With Multi-Product Display



1 Dashed lines appear in both displays. - - - - - - - -

2 Press a product button. MCCK

3 Vat with appropriate setpoint displays: MC CHICK

4 Vat with inappropriate setpoint displays: <<<<>>>>

5 Press a cook channel button to begin cook cycle. 1

6 Display alternates between MCCK and remaining cook time. MC CK / 2:34

7 If a duty is required for this menu item, duty is displayed when it is time to perform a duty, such as shake. DUTY

8 Press cook channel button under duty display to cancel alarm. 2

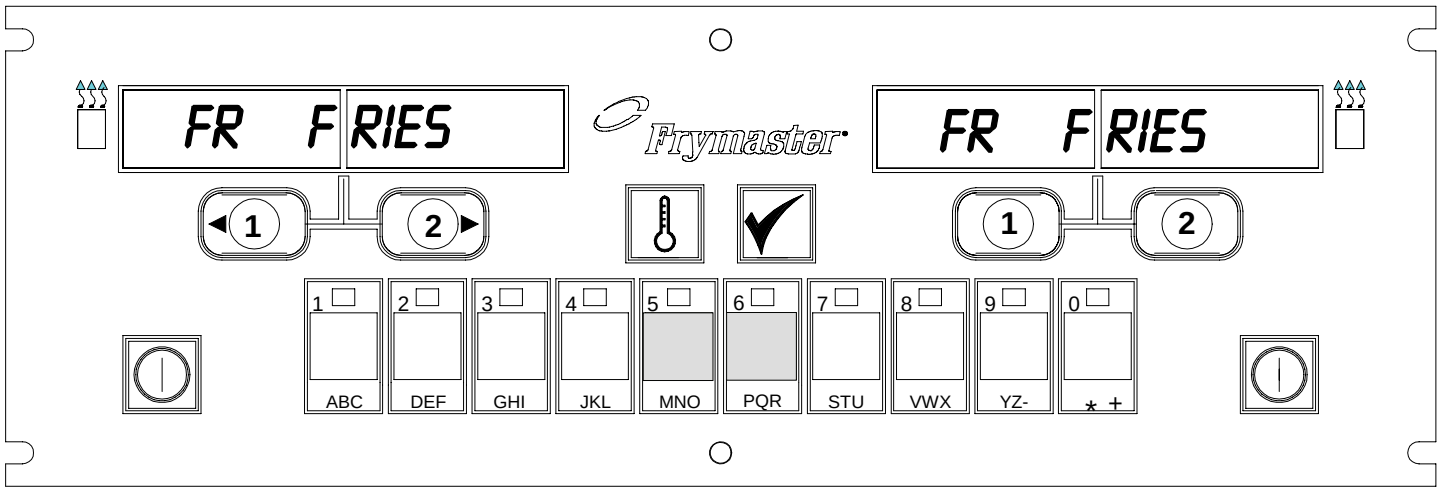
9 Pull is displayed when the cook time is complete; an alarm sounds. PULL

10 Press cook channel button under pull display to cancel alarm. 2

11 Dashed lines reappear under active display at the end of the cook cycle. - - - - - - - -

M2000 Computer

Cooking With Dedicated Display



1 A menu item, such as FR FRIES shows in display — FR FRIES

2 Press a cook channel button to begin the cook cycle. — (1)

3 Display alternates between abbreviated product name and remaining cook time. — FRIS ⇄ 2:34

4 Duty is displayed when it is time to shake the fry basket. — DUTY

5 Press cook channel button to cancel alarm. — (1)

6 Pull is displayed when the cook cycle is complete. — PULL

7 Press cook channel button to cancel alarm. — (1)

8 Q7 is displayed and alternates with FRES. As the quality time counts down. — Q7 ⇄ FRIS, Q1 ⇄ FRIS

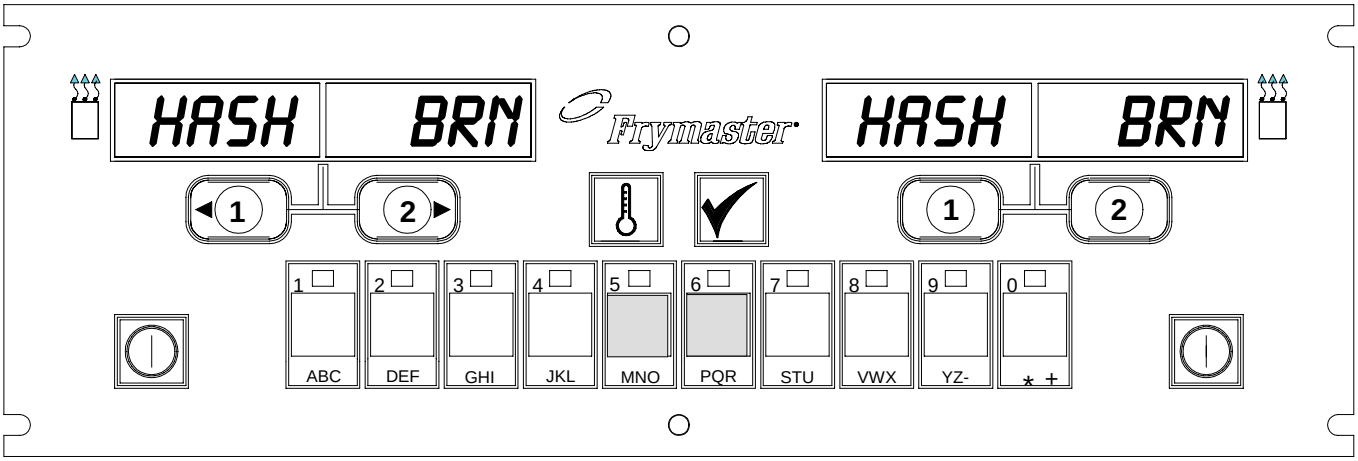
9 *Pressing the cook channel button now will launch a cook cycle and end the quality countdown.* — (1)

10 QA is displayed when the quality time has elapsed. — QA

11 Pressing the cook channel button restores the display to FR FRIES and the unit is ready for cooking. — (1) → FR FRIES

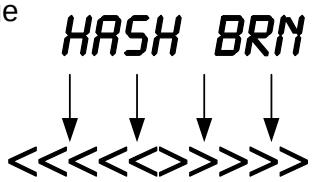
M2000 Computer

Changing from Breakfast Setup to Lunch

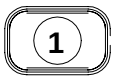


1 Press product button for french fries.

2 Computer will change from Hash Brn to <<<<<>>>>>; an alarm will sound.



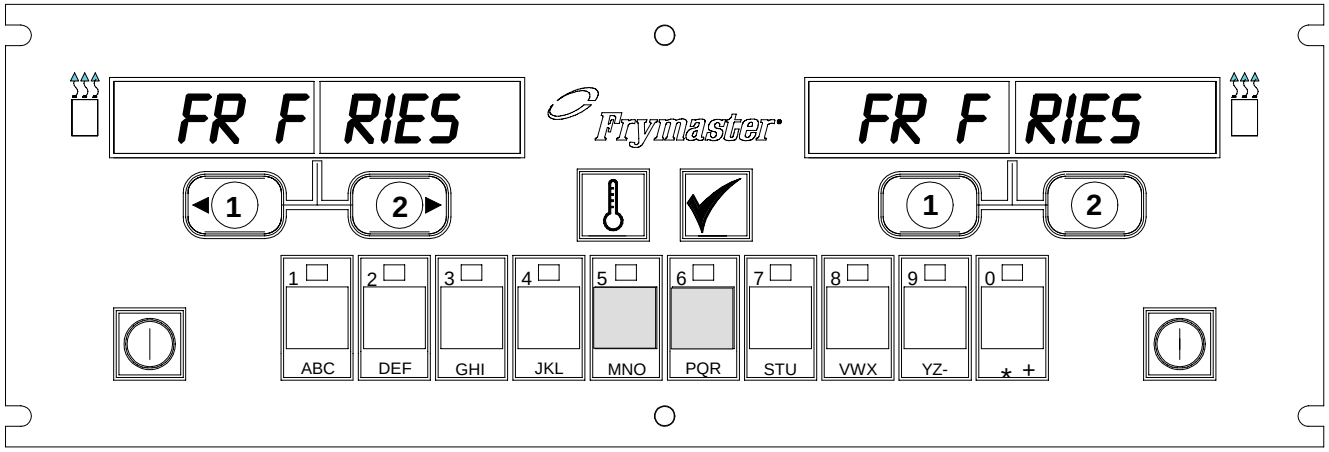
3 Press and hold the cook channel button under the display for five seconds.



4 Display changes to FR Fries.

Change both displays to FR FRIES

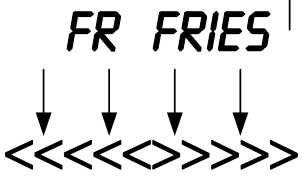
Changing from Lunch Setup to Breakfast



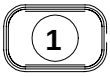
1 Computer displays FR FRIES

2 Press product button for hash browns.

3 Computer display will change from FR Fries to <<<<<>>>>>; an alarm sounds.



4 Press and hold the cook channel button under the display for five seconds.

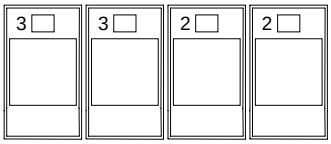


5 Display changes to Hash Brn. HASH BRN

M2000 Installation/Setup

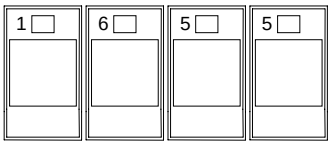
Computer Setup: Selecting Language, Sound Volume

Used for initial setup of computer.

1. Computer displays OFF.
2. Press ✔.
3. CODE shows in the left display.
4. Press 

(3322).
5. The left computer display will alternate between LOADING and MENU. The right display will count up to 39 and go blank.
6. Computer displays OFF.
7. Press ✔.
8. CODE shows in the left display.

Computer has two volume settings.

9. Press 

(1655).
10. VOLUME appears in the left display; HIGH or LOW in the right.

Used to set language shown in display.

11. Press ❗ to toggle between high and low-volume warning sounds.
12. With preferred setting in right display, press ✔ to lock in choice.

***NOTE:** Changing the language displayed or the menu parameter on a previously programmed computer eliminates any programming entered for special menu items.

13. LANGUAGE appears in the left display*; ENGLISH in the right. *See page 8-3 for instructions to change temperature display from Fahrenheit to Celsius.*
14. Press ❗ to toggle between language choices.
15. With desired language in the right display, press ✔ to lock in choice.

M2000 Installation/Setup

Used to set menu parameter defaults for US or non-US menu items.

***NOTE:**
Changing the language or the menu choicer on a previously programmed computer eliminates any programming entered for special menu items.

16. MENU appears in the left display*; USA or NON-USA appears in the right.

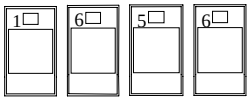
17. Press to toggle between menu choices.

18. With desired menu in the right display, press to lock in choice. If changed from the default English setting, the left computer display will alternate between LOADING and MENU. The right display will count up to 38 and go blank.

19. The computer will display OFF.

20. Press .

21. CODE appears in left display.

22. Press  (1656) with product keys.

Sets up fryer for gas or electric, full or split vat operation.

23. GAS appears in the left display. YES in the right.

24. Press to toggle between YES and NO. Choose YES for a gas fryer. Choose NO for an electric fryer.

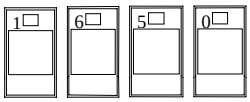
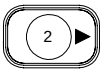
25. With desired choice displayed in the right window, press to advance to the next choice.

26. SPLIT appears in the left display, YES in the right. Press to toggle between YES and NO. Use YES for split vats; NO for full.

27. Press to advance to next choice.

28. Screen goes blank. OFF is displayed. The computer is ready for programming as outlined in the following sections.

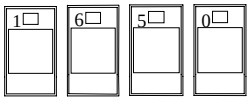
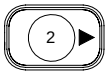
Programming for Dedicated Product Operation

Example: Programming Dedicated Vats	1. Computer displays OFF (Computer must be off to enter program mode.) 2. Press ☑ 3. Code appears in left display 4. Press  (1650) with product keys. 5. FR FRIES appears in the left display. Right display is blank.
Stores menu item in product button.	6. The LED will illuminate in product button 1, the default product button for fries.
	7. Press  to advance to another menu item if required. *In this example the computer is dedicated to french fries.*
Sets setpoint for fries.	8. Press on right side of computer. YES appears above both buttons on a full pot; it appears only above on a split pot. This step sets the vat setpoint to 335°F (168°C), the setpoint for french fries.
	9. Press on right side of computer. YES appears in display above button. This step sets the right vat setpoint on a splitpot to 335°F (168°C).
Sets duty time.	10. Press ☑. Duty 1 appears in the left display. M :30 in the right. This sets the seconds into the cook cycle that a duty alarm sounds. M :30 is the default setting and should be used.
Sets alarm cancellation choice.	11. Press to toggle between automatic and manual alarm canceling. The left display will alternate between M :30 and A :30 as is pressed. Manual alarm canceling is the default setting.
Sets second duty alarm.	12. Press ☑. Duty 2 appears in the left display. M :00 appears in the right. This sets the time into the cook cycle in which a

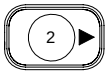
Programming for Dedicated Product Operation

	second duty alarm will sound.
Sets Cooktime.	13. Use numbered product keys to enter a time if required. M :00 is the default setting.
	14. Follow step 10 to toggle between automatic and manual alarm canceling.
	15. Press . Remove appears in left display. M 3:10 appears in the right. This sets cook time for the product selected. Use numbered keys to change time as required. 3:10 is the default cook time for french fries.
Sets Quality time.	16. Press to toggle between automatic and manual alarm canceling.
	17. Press . QUAL appears in left display. M 7:00 in the right. This is the default quality hold time for french fries. Use numbered product keys to change time as required. Entering zero will disable the quality timer.
Sets product cooking temperature or setpoint.	18. Press to toggle between automatic and manual alarm canceling.
	19. Press . Set-Temp appears in the left display. 335F (168°C) appears in the right. This is the default setpoint for french fries. Use numbered product keys to change if required.
	20. Repeat steps 7-19 for additional items.
	21. With the last programmed menu item displayed on the computer, press to lock in menu item and exit programming.

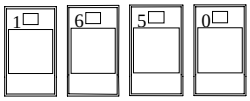
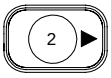
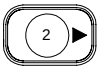
Programming Multi-Product Operation

Programming Multi-Item Vat	1. Computer displays OFF (Computer must be off to enter programming mode.) 2. Press 3. Code appears in left display 4. Press  (1650) with product keys. 5. FR FRIES appears in the left display. Right display is blank. 6. The LED will illuminate in product button 1, the default product button for fries. 7. Press  to move to the next menu item. 8. Filet appears in the left display.
Stores menu item in product button.	9. Choose and press the product button to store the cooking cycle. The LED in the chosen product button will illuminate. The right display is blank.
Sets cooking temperature.	10. Press on the right side of the split pot fryer and YES appears in the display above the cook channel button. This sets the setpoint to the temperature for filets.
Sets duty time.	11. Press . Duty 1 appears in the left display. M :00 in the right. This sets the seconds into the cook cycle that a duty alarm sounds. 12. Press to toggle between automatic and manual alarm canceling. The left display will alternate between M :00 and A :00 as is pressed. Manual alarm canceling is the default setting. 13. Press . Duty 2 appears in the left display. M :00 appears in the right. This sets the time into the cook cycle in which a second duty alarm will sound.

Programming Multi-Product Operation

	14. Use numbered product keys to enter a time if required. M :00 is the default setting. 15. Follow step 12 to toggle between automatic and manual alarm canceling.
Sets cook time.	16. Press . Remove appears in the right display. M 3:40, the default cook time for filets, appears in the right display. Use numbered product keys to enter a new cook time in minutes and seconds as required. 17. Press to toggle between automatic and manual alarm canceling.
Sets quality time.	18. Press . Qual appears in the left display; M :00 in the right. Use numbered product keys to enter a hold time for the product. If quality timer is not required, enter 0:00. 19. Press to toggle between automatic and manual alarm canceling.
Sets vat to be used for chosen product.	20. Press . Set-Temp appears in the left display; 350F (176°C) appears in the right. Use numbered product keys to enter a new setpoint if required. 21. Press . Filet appears in left display; Yes in right. 22. Press  to move to the next desired menu item, for example, McChicken. 23. Repeat steps 9-21 to enter additional menu items. 24. With the last programmed menu item displayed on the computer, press to lock in menu item and exit programming.

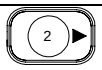
Programming New Menu Items

Adding New Menu Items	1. Computer displays OFF (Computer must be off to enter programming mode.) 2. Press 3. Code appears in left display 4. Press  (1650) with product keys. 5. Use the  to advance through menu items until the display reads Prod 8 or a higher number. 6. Press and right display will read EDIT. The first character in the left display will flash.
Enter product name.	7. Use keys to enter name of the product. Each key can display one of three letters. Press the key labeled with the needed letter until that letter appears. 8. Press to advance cursor. Use the #0 key to insert a space. 9. For example to enter "WINGS", press the #8 product key until w appears in the display. 10. Use the  to advance the cursor to the next display space. Press the #3 key until I appears. Continue until WINGS is spelled out on display. 11. Press . 12. A P flashes and a number is displayed. Use steps 7-10 to enter an abbreviated name for the menu item. The shortened name will alternate with the cook time during a cook cycle. 13. Press . The newly entered product name appears on left. 14. Choose and press a product button, if desired, to store the cooking cycle for the new product. The LED in the chosen product button will illuminate. The right display is blank.

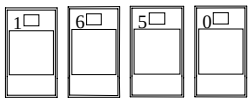
Programming New Menu Items

	15. Press . Duty 1 appears in the left display. M :00 in the right. Use product keys to enter a duty time as required. 16. Press to toggle between automatic and manual alarm canceling. Manual alarm canceling is the default setting.
Sets first duty.	17. Press . Duty 2 appears in the left display. M :00 appears in the right. 18. Use numbered product keys to enter a time if desired.
If no duty time is required, enter 0:00.	19. Press to toggle between automatic and manual alarm canceling. 20. Press . Remove appears in the right display. M:00 in the right. Use numbered product keys to enter a cook time in minutes and seconds. 21. Press to toggle between automatic and manual alarm canceling.
Sets cook time.	22. Press . Qual appears in the left display; M :00 in the right. Use program keys to enter a hold time for the product as required. 23. Press to toggle between and manual alarm canceling.
Sets setpoint.	24. Press . Set-Temp appears in the left display; 32F (0°C) appears in the right. Use product keys to enter a setpoint 25. Press and PROBE appears in the left display; YES appears in the right.. 26. Use to toggle between YES and NO. Leave NO in the display to disable probe feature. 27. Press . The new product name appears in the left display, YES in the right.

Programming New Menu Items

	28. Press  to advance to next programmable menu location. 29. With the last programmed menu item displayed on the computer, press to lock in menu item and exit programming.

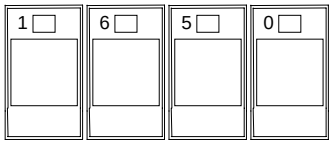
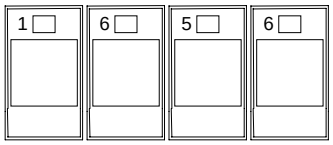
M2000 Adding/ Selecting Boilout

Add Boil Out	1. Computer displays OFF. 2. Press . 3. Left display shows CODE. 4. Enter  (1650) with product keys. 5. Use to back through programmed items and numbered products to Boil Out, which is in the product 40 position. 6. Press a gray product button to store Boil Out. Green LED in button will illuminate. 7. Press ON/OFF button to turn off fryer and lock in programming.
Select Boil Out	1. Press to turn fryer off. 2. Computer displays OFF. 3. Drain shortening from fryer. 4. Add boil-out solution to frypot to be cleaned. 5. Press to turn fryer on. Display will show LOW Temp on display. 6. Press used to store boil out programming. 7. <<<<>>> will appear in computer display.

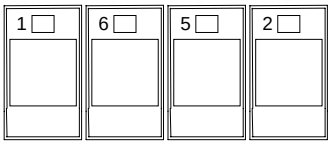
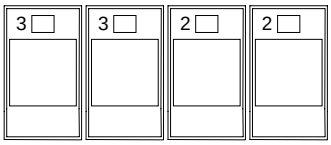
M2000 Adding/ Selecting Boilout

	8. Press and hold the cook channel button under the vat that is to be boiled out. Hold for approximately five seconds and release. Boil Out should appear in display over button. 9. The cook channel will be dedicated to boil out and have a setpoint of 195° F (90°C). 10. Press cook channel under Boil Out display. Follow McDonald's boil out procedures outlined in PM cards. 11. Upon completion of boil out, follow steps in Adding or Changing Dedicated Items to rededicate the fry vat to a menu item.

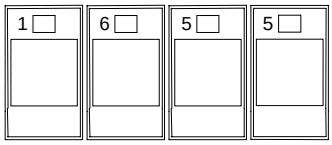
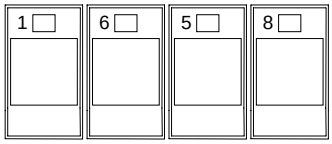
Quick Reference For Programming Codes

Programming Used to program product buttons and add new menu items.	1. Press . 2. Computer displays OFF. Computer must be off to enter programming mode. 3. Press . 4. code shows in the left display. 5. Press  (1650). *See detailed description on pages 4-2 — 6-3.*
Set Up Used to set up computer on initial install or to move a computer to a fryer with a different configuration.	1. Press . 2. Computer displays OFF. 3. Press . 4. code shows in the left display. 5. Press  (1656). *This code is used to set up the computer. See detailed description on pages 3-1— 3-2.*

Quick Reference For Programming Codes

Recovery Check Displays time required for the fryer to raise the temperature of the oil 50°F (10°C) during a critical stage of warmup.	1. Press . 2. Computer displays OFF. 3. Press . 4. code shows in the left display. 5. Press  (1652). 6. A time appears in both displays. This code is used to check the fryer's recovery time.
Factory Reset Reloads factory settings for standard menu items. **Note:** Following a factory reset, check all cook times, setpoints, duty and quality times to ensure they are set to specifications established for your restaurant.	1. Press . 2. Computer displays OFF. 3. Press . 4. CoDE shows in the left display. 5. Press  (3322). 6. This is used to set the computer to factory defaults. *See detailed description on pages 3-1— 3-2.*

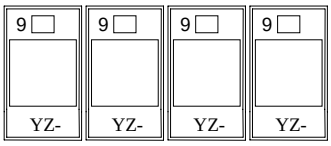
Quick Reference For Programming Codes

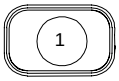
Set Language Displayed, Sound Level Used to set speaker volume, choose language of the computer display and domestic or international menu defaults.	1. Press . 2. Computer displays OFF. 3. Press . 4. code shows in the left display. 5. Press  (1655). *See pages 3-1 — 3-2 for complete setup instructions.* **NOTE:** Changing the language displayed on the computer or the menu selection, eliminates any specialized product programming entered by restaurant personnel.
Changing from Fahrenheit to Celsius	1. Press on computer displaying Fahrenheit temperature. 2. Computer displays OFF. 3. Press . 4. CoDE shows in the left display. 5. Press  (1658). 6. Computer screen displays go blank briefly then displays OFF. 7. Press . Press . Temperature now displays in Celsius. Repeat steps 1-7 to change back to Fahrenheit.

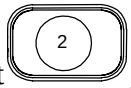
Quick Reference For Programming Codes

Hi-Limit Check

***Note: For left-side use 8888 and the left 1 & 2 buttons)**

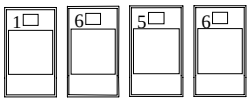
1. Press .
2. Computer displays OFF.
3. Press .
4. CoDE shows in the left display.
5. Press 

(9999*) for full vat or right side of split pot. **Note:** The test can only be conducted with the oil above 180°F (82°C). If the shortening temperature is below 180°F (82°C), the computer will display TOO COLD.
6. HI-LIMIT shows in the right display.
7. Press and hold 

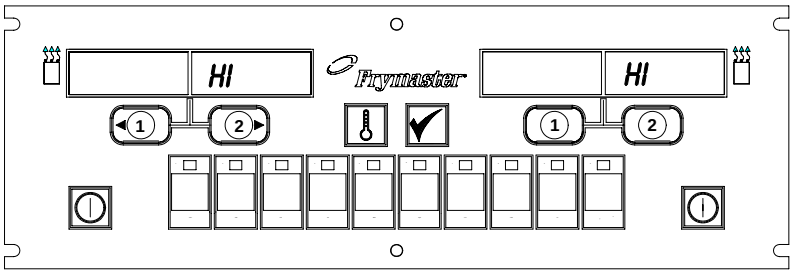
right cook channel key.
8. Fryer will call for heat and illuminates.
9. Right display will alternate between HI-limit and the temperature until shortening reaches 410°F (210°C). Then the display changes, alternating between Hi-1 and the temperature.
10. Heat is turned off now and hi-1 test is complete.
11. Press and hold right 

, which starts Hi-Limit 2 test.
12. The display will alternate between Hi-Limit and the temperature display until the hi-limit opens. The display will show Hi-2.
13. Press to clear test and turn computer off.
14. Failure of the Hi-Limit 2 test is indicated by an alternating display of HI-2 and BAD. Call for service immediately if this occurs.

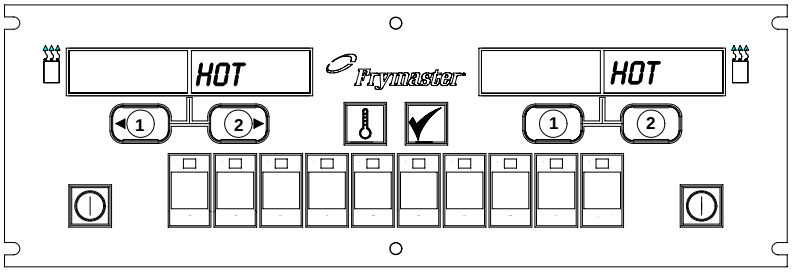
Quick Reference For Programming Codes

Moving Computer to Different Fryer Used when the computer is moved to a fryer with a different configuration.	1. Press ✔. 2. Code appears in left display. 3. Press  (1656) with product keys. 4. Gas appears in the left display, YES in the right. 5. Press ! to toggle between YES and NO in the right display. Leave YES in the display for a gas fryer; leave No for an electric fryer. 6. Press ✔ to lock in your choice. 7. Split appears in the left display, Yes in the right. 8. Press ! to toggle between Yes and No. Leave Yes in display for a split vat; leave No in the display for a full vat. 9. Press ✔ to lock in choice. 10. Screen goes blank and OFF is displayed.

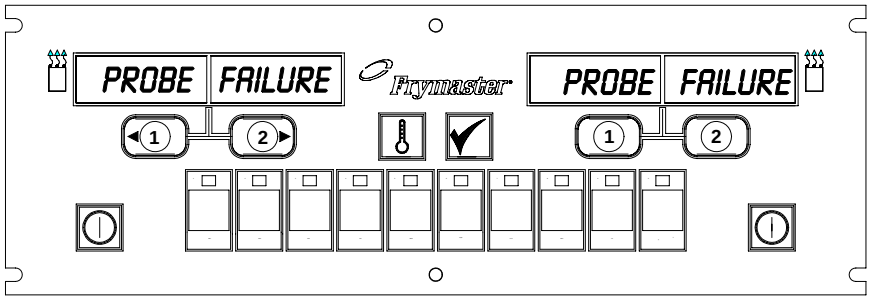
Distress Displays



HI: Shown only when the computer is in non-dedicated mode (displaying dashed lines). Indicates the fryer is 15°F (8°C) above setpoint.

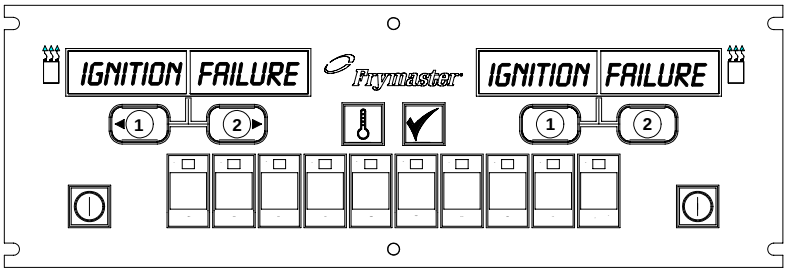


Hot: Displayed when the vat reaches 410°F (210°C).

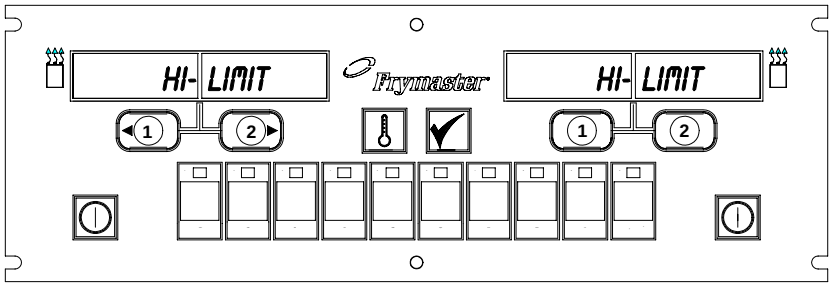


Probe Failure: An alternating display indicating a failed temperature probe or a failure in the temperature probe circuit.

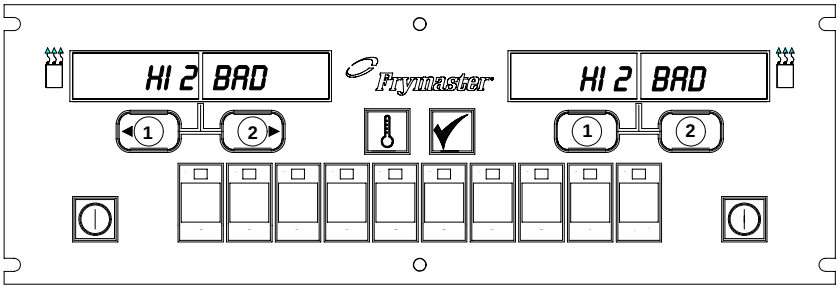
Distress Displays



Ignition failure: Indicates the fryer is not heating. It is displayed when the oil temperature is above 450°F (232°C) and the hi-limit has opened, halting the heating of the oil. It is also displayed if the fryer looses its ability to heat oil.

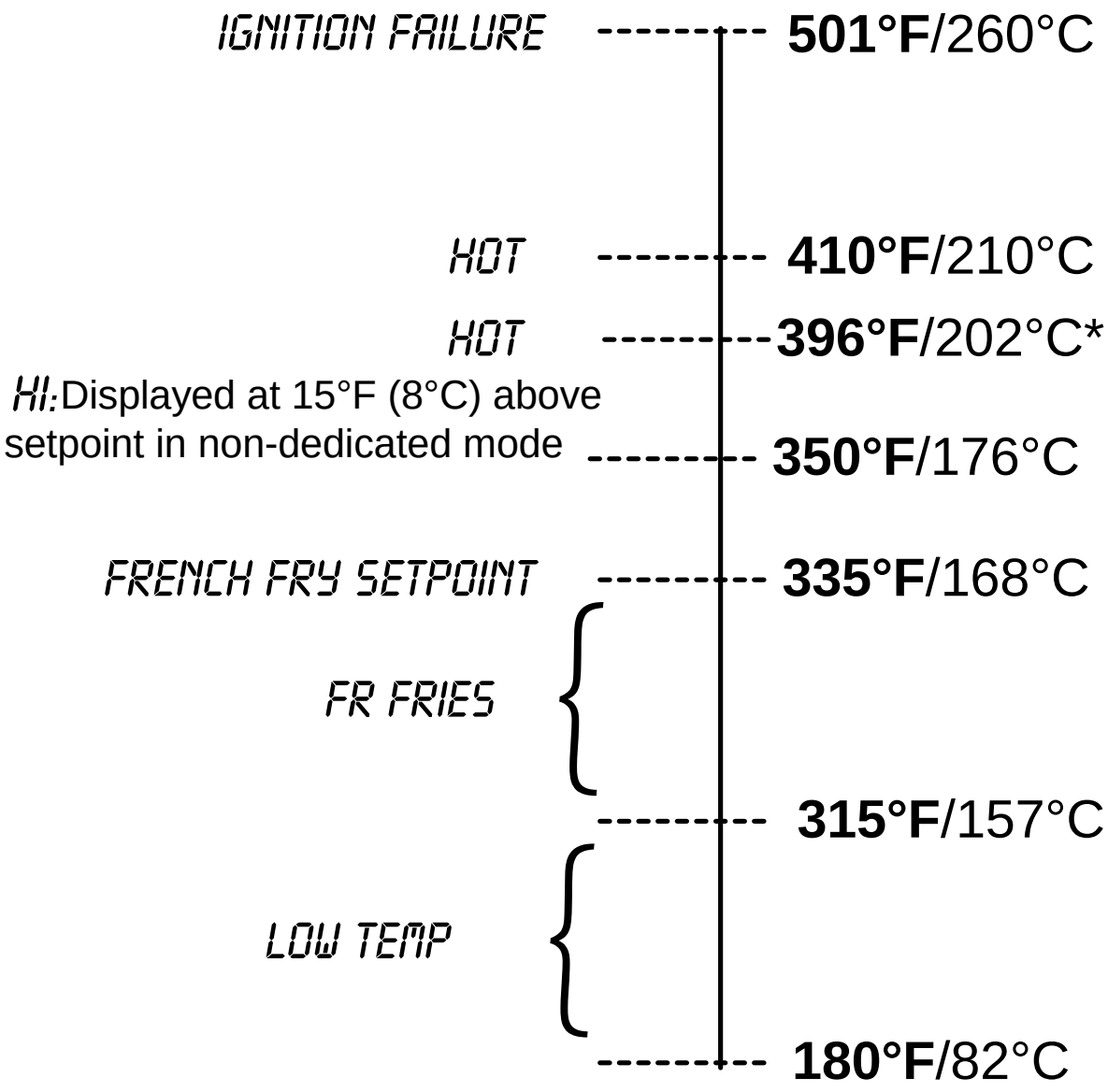


Hi-Limit: Displayed during a test of the hi-limit system.



Hi 2 Bad: Only displayed during a test of the hi-limit system. Indicates the hi-limit has failed.

Distress Displays



Temperature/Display Chart for M2000

*CE display

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