

(FASTRON.)[®]

MERIDIAN Series

Built-In Cooking Controllers

MEC-110 (10 Product Keys)

MEC-118 (18 Product Keys)

Operating Guide



MEC-110 (10 Product keys)



MEC-118 (18 Product keys)

Toll-Free Technical Support

24 Hours A Day, 365 Days A Year

(from the U.S., Canada and the Caribbean)

1-800-243-9271

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(FAST.)[®]

the time is right.



(FAST.) is not liable for any use of product not in accordance with its installation and operating instructions.

Before using this equipment, or for any questions on the operation of the appliance, consult and follow all instructions and safety warnings found in the appliance operator's manual supplied from the manufacturer of the appliance.

Not all features are available on some models.

COOKING CONTROLLER OPERATING ENVIRONMENT

The solid state components in this controller are designed to operate reliably in a temperature range up to 158°F/70°C. Before installing this controller, it should be verified that the ambient temperature at the mounting location does not exceed 158°F/70°C.

CLEANING THE CONTROLLER

Using a clean damp cloth, wipe down your controller daily using a commercial quality foodservice-approved detergent.

Do not allow oil to build up on any part of the controller.



NEVER use chemical or abrasive cleaners on your controller. The controller's overlay may be damaged.

NOTE: This manual will thoroughly familiarize you with the operation of the (FASTRON.) Controller so that you may use it in the most effective way to enhance the smooth running of your restaurant's cooking operations.

If any problems occur, or if you have any questions about the instructions, contact FAST technical support toll-free at 1-800-243-9271.

TOOLS NEEDED

- Straight Screwdriver

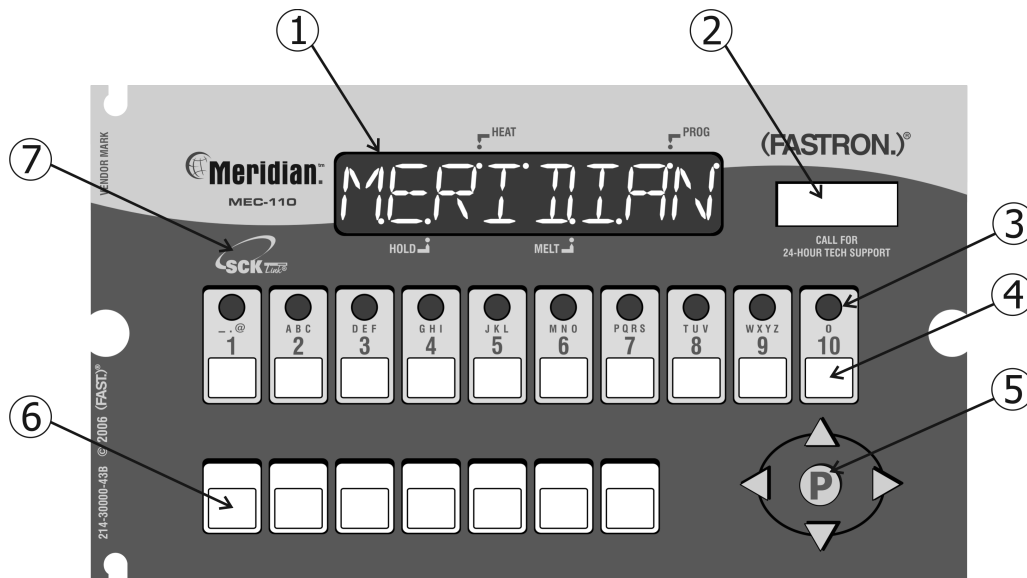
INSTALLATION

1. Turn appliance power OFF.
2. Connect the wire harness to the controller.
3. Attach the 2 provided tinnerman nuts to the controller. Be sure to line up the holes.
4. Hold the controller against the front panel.
5. Secure the controller to the appliance using the 2 provided screws.

(FASTRON.) Meridian Controller Features

PROGRAMMING CODES

Product Programming 1 7 2 4
System Programming 3 2 2 8
Boil Mode 1 7 2 4



- 1 LARGE LED DISPLAY: 8-character, 14-segment. Displays programming and cook cycle information.
- 2 SERVICE WINDOW: Locate the controller's serial number and tech support phone number easily.
- 3 INDICATOR LIGHTS: lit when there's an active cook cycle and in programming mode.
- 4 PRODUCT KEYS: Press to start a cook cycle. Also used in programming.
REPLACEABLE MENU STRIP: Make menu changes quickly and easily.
- 5 (FAST.Nav)[™] PROGRAMMING CENTER: Easy mobile phone-like programming. Access programming mode and change cooking parameters.
- 6 FEATURE KEYS: Used to access programming functions and controller features; keys will vary by model.
- 7 SCK LINK[®]: Signifies that your control is communications-capable.

Programmable Action Alarms

Up to three action alarms can be programmed for each product key. An action alarm alerts the operator to perform some action at a pre-programmed time.

Programmable Appliance Type

A specific type of appliance; i.e., gas, electric or generic can be programmed into the controller.

Energy Saving Manual Setback

Setback, an energy-saving feature, will lower the temperature of the oil after a pre-determined amount of inactive time (1 to 59 minutes). Temperature is programmable from 200-300°F (93.3-148.8°C). Enter setback mode by pressing the SETBACK key. The controller will display COOL or SETBACK and will control the appliance to the programmed setback temperature.

Fahrenheit or Celsius Temperature Display

The controller can be configured to display the temperature in degrees Fahrenheit or Celsius (accessible through System Programming mode).

Programmable (FAST.Flex)[™] Timing Mode

Flex or straight timing can be configured for each stage on each product key. To insure consistent, high-quality food product, flex time will adjust the actual cook time taking into consideration the temperature variation due to load size, initial product temperature, product moisture content, and other factors affecting the cook cycle. If cooking by straight time, the controller will cook only for the specified time without adjusting for these variances.

Programmable Filter Lockout Cycle Count

Ensure good-tasting food is always served to your customers by requiring the oil be filtered after "x" amount of times. Any product key with Filter Lockout programmed will cease to operate until the oil is filtered. A filter lockout cycle count (valid range 0 to 99) can be programmed for each product key. To disable filter lockout, enter 0 for the filter lockout count.

Programmable Global Filter Lockout

A single filter lockout cycle count can be programmed to apply globally to all product keys.

Programmable Hold Time Linking

Each product key can be linked to an independent hold timer, or multiple product keys can be linked to a single hold timer.

Programmable Hold Times

Product key hold times can be programmed to track product quality through a specified holding period. Hold time countdown begins as soon as the cook cycle is complete. The controller will sound an alarm when the product's hold time has expired alerting the operator to discard the product.

Automatic Least Hold Display

Product with the least amount of hold time remaining will be shown in the display. Pressing and holding the SCAN key allows you to view each active product's remaining hold time.

Melt Cycle

If the vat temperature is below the Melt Limit Temperature and the controller is ON, it will control the melting of the oil.

Programmable Operating Mode

The controller can be programmed to operate as either a controller or timer.

Programmable Pressure Valve

The pressure valve state for each stage on each product key can be programmed. The valve can be open or closed.

Note: The valve is normally open when not cooking.

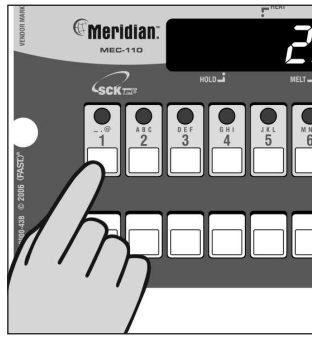
Programmable Stage Temperatures

Cook temperatures for each stage on each product key can be programmed. The valid temperature range is 200°F to 400°F (93.3°C to 204.4°).

Programmable Stage Times

Cook times for each stage on each product key can be programmed. The controller is programmable in minutes (up to 99) and seconds (up to 59) and allows up to ten stages per product key.

NOTE: Multiple cook starts are not allowed if a product key has more than one stage programmed.



Start a Cook Cycle

Press any product key to start a cook cycle. If the key is programmed, the correct cooking time will be displayed and will immediately start to count down in minutes and seconds. DONE will display when the cook cycle has ended.

The pressure solenoid will also close if programmed to do so, or a basket lift will lower if so equipped.

If DONE is displayed immediately and the unit starts to signal, the product key being pressed is not programmed.

Stop a Cook Cycle

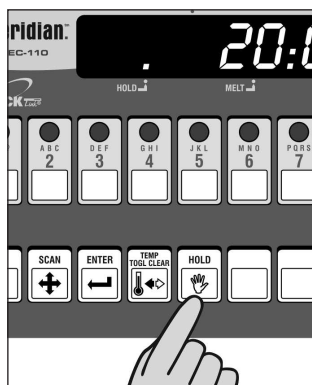
Press and hold an active product key for 3 seconds. Timing will stop.

Respond to a DONE Alarm

Cancel the signal by pressing the same product key used to start the cook cycle.

Action Alarms

If the controller is programmed for action alarms, they will signal at a preset time during the cooking cycle. The signal, a dual-rhythm beeping, will last 5 seconds and then self-cancel. The display will flash the action alarm time and the controller will start counting toward 0:00.



Holding Timers

If the controller is programmed with holding times, they will automatically start counting upon expiration of the cooking cycle.

When there are active hold times, the HOLD indicator light will be lit.

To View All Active Hold Times, press and hold the HOLD key. Upon expiration, the timer will display HOLD and pulse with an audible tone. To acknowledge, press the HOLD key.

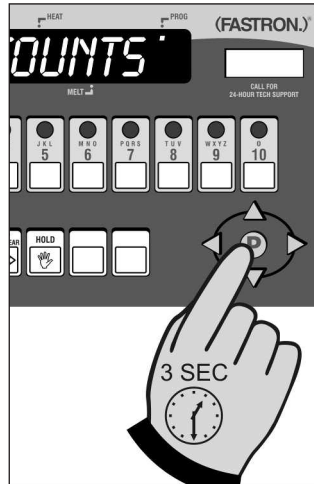
Boil Mode



CAUTION: THE USER MUST CONSULT AND FOLLOW THE APPLIANCE MANUFACTURER'S GUIDELINES FOR CLEANING AND BOILING OF THE FRY VATS.

If your fryer manufacturer recommends this procedure, the boil function accurately maintains the fryer temperature at 190°F (88°C) to assist in the cleaning of fry vats. To start the boil process, turn the appliance OFF. Empty the fry vat of oil. Once the vat is emptied of oil and refilled with cold water, the controller and fryer may now go into boil mode.

The fry vat must be below a temperature of 200°F (93.3°C) to enter the boil mode.



NOTE: The fry vat will maintain a temperature of 190°F (88°C) to allow the boil function to be performed.

To Enter Boil Mode: Press and hold the P key for 3 seconds. COUNTS will be displayed.

Press the up or down arrow keys until BOIL is displayed, then press the P key. BOIL will be displayed.

To Exit Boil Mode, press and hold the P key for 3 seconds. COUNTS will be displayed.

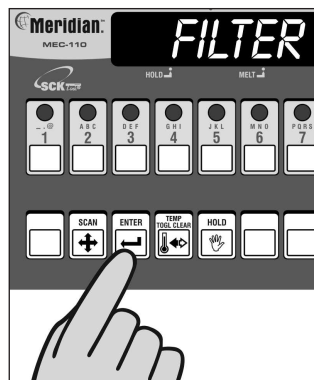
Press the up or down arrow keys until BOIL is displayed, then press the P key. The controller has now exited boil mode. If unit has an ON/OFF, you can also exit by turning the unit OFF then back ON.



CAUTION: Refill the vat with oil ONLY when it is completely dry.

Fill Mode

If the controller is programmed for filter lockout, FILTER will appear in the display after the pre-programmed number of cook cycles allowed. The controller will stop operating until the fryer is filtered. After filtering, the display will read FILL. **At this time, the fryer MUST be refilled with oil.** When this step is complete, press ENTER to resume normal operations.



Product Counts

To Check Product Counts: press and hold the P key for 3 seconds. COUNTS will be displayed.

Press the P key. PROD 1 will be displayed then the number of cooks that were completed on that key. To see the number for each key, continue to press the P key and each product will display PROD X then the number of cooks.



Resetting the Product Counts: Once you go through all keys, the display will show CLRPROD then NO. Use the left and right arrow keys to toggle between YES and NO. Choose YES to reset your product count or NO to save the cook counts that have already been completed. Then press the P key.

The display will show GLOBAL. This is the total product count of all keys combined. Press the P key again. CLRGLOBL then NO will be displayed. Use the left and right arrow keys to toggle between YES and NO. Choose YES to reset your total product count or NO to save the total cook counts that have already been completed. Then press the P key. TOTALX10 is displayed, then a number. Press the P key again.

To Exit Product Counts: COUNTS will be displayed. Press the up arrow key. EXIT will be displayed. Press the P key. The controller will exit programming mode.

Display Descriptions

LO

Controller is in Operating Mode. Actual vat temperature is more than 10 degrees below the programmed vat temperature.

Controller is in Operating Mode. Actual vat temperature is within the proper cooking temperature range. The vat is ready to start a cook cycle.

DROP

READY

HI

Controller is in Operating Mode. The actual vat temperature is more than 40 degrees above the highest programmed vat temperature. A continuous audible alarm will sound.

PROBE

Controller's probe is either open or shorted. Display will be accompanied with an audible alarm if shorted. Check or replace the probe.

2:30

Controller is in Operating Mode and a cook cycle is in progress.

DONE

Controller is in Operating Mode and a cook cycle has been completed.

CODE

Controller is waiting for a pass code to be entered.

PRODUCT

Controller is in Product Key Programming Standby mode.

TIME 1

Stage cooking time (1-10) is displayed.

TEMP 1

Stage cooking temperature (1-10) is displayed.

TIMING 1

Stage timing mode (1-10) (flex or straight) is displayed.

PRESS 1

Solenoid condition (1-10) (open or close) is displayed.

ALRTIME1

Action alarm status is displayed.

FILL

After fryer is filtered, this display prompts you to refill the fryer with oil.

SYSTEM

Controller is in System Programming Standby Mode.

TEMPUNIT

Controller is in Fahrenheit or Celsius Programming Mode.

APPLIANC

Controller is in Appliance Type Programming Mode.

Programming: PRODUCT KEY



18 button controllers have two displays that show a full line of information; for example:

TIME **2:00**

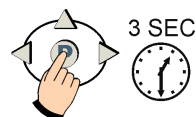
10 button controllers have a single, dual-purpose display that will alternate information; for example:

TIME then **2:00**

RECIPE 1724 STORE EMPLOYEE

ENTER PROGRAMMING MODE.

Press and hold the P key for 3 seconds.



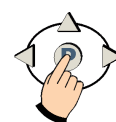
COUNTS

Press the down arrow key.



PROGRAM

PROGRAM will be displayed.
Press the P key.



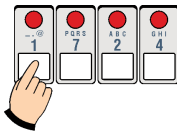


Some controllers may have different options listed.

Depending on model, you can either press the P key to change all programmable settings or you can scroll using the arrow keys to any of the specific options.

CODE

Type in 1 7 2 4 using the product keys. Press the P key.



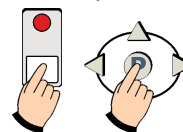
RECIPE

Press the P key. All product key LEDs will light up.



PRODUCT

PROGRAM A PRODUCT KEY. Press the product key you want to program. Press the P key.



ALL

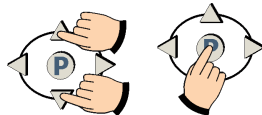
Press the P key.



NAME

XXXXXXXXXX

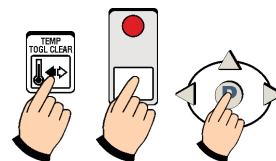
SET PRODUCT DISPLAY NAME. NAME will be displayed then the actual product name. Use the up and down arrow keys to scroll through the library. Press the P key to lock in your choice.



TIME 1

XX:XX

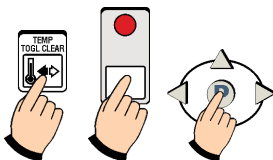
SET COOK TIME. Actual set time will be displayed. To change, press toggle clear to change the time to zero. Type in a new time using the product keys. Press the P key.



TEMP 1

XXXF

SET COOK TEMPERATURE. Actual set temperature will be displayed. To change, press toggle clear to change the temperature to zero. Type in a new temperature using the product keys. Press the P key.



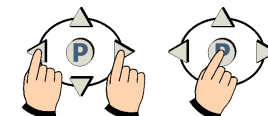
TIMING 1

STRAIGHT

FLEX

SENSITIV

SET TIMING MODE. Use the left and/or right arrow keys to choose Straight, Flex or Sensitivity. Press the P key.

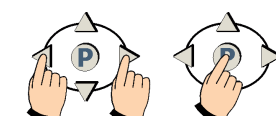


PRESS 1

OPEN

CLOSED

SET SOLENOID MODE. Use the left or right arrow keys to choose either OPEN or CLOSED. Press the P key.



Some models have up to 3 action alarms.

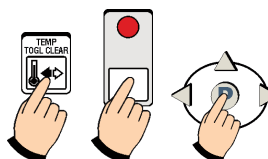


NOTE: On some models, each product key can be programmed with up to 10 stages. If no additional stages are required at this point, set the time to zero. Press the P key to continue to Action Alarm.

TIME 2

XX:XX

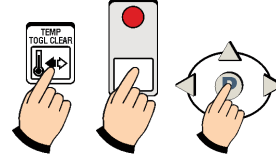
SET COOK TIME #2. Actual cook time will be displayed. To change, press toggle clear to change the time to zero. Type in a new time using the product keys. Press the P key. Repeat above steps.



ALTIME1

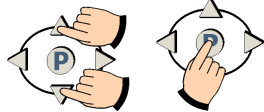
XX:XX

SET ACTION ALARM. Actual alarm time 1 will be displayed. To change, press toggle clear to change the time to zero. Type in a new time using the product keys. Press the P key.



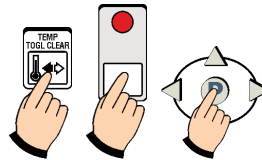
ALMNAME1
XXXXXXXX

SET ACTION ALARM NAME. ALMNAME1 will be displayed, then the actual action alarm name. Use the up and down arrow keys to scroll through the library. Press the P key to either go to next action alarm name, or continue through programming.



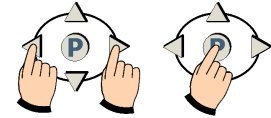
HOLDTIME
XX:XX

SET HOLD TIME. Actual hold time will be displayed. To change, press toggle clear to change the time to zero. Type in a new time using the product keys. Press the P key.



FILTRCNT
X
NONE

SET FILTER COUNT. Actual filter count will be shown (1-99 or NONE). Use the left and right arrow keys to set a new filter count. Press the P key.



ALL

EXIT PROGRAMMING MODE. Press the up arrow key.



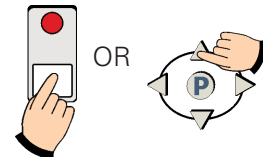
EXIT

Press the P key.



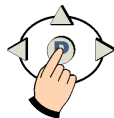
PRODUCT

Either press another product key to program and repeat the programming instructions, or exit by pressing the up arrow key.



EXIT

Press the P key.



RECIPE

Press the up arrow key.



EXIT

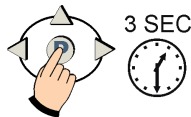
Press the P key.



Programming: SYSTEM

SYSTEM 3228 STORE MANAGER

ENTER SYSTEM PROGRAMMING MODE. Press and hold the P key for 3 seconds.



COUNTS

Press the down arrow key.



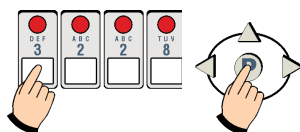
PROGRAM

PROGRAM will be displayed. Press the P key.



CODE

Type in 3 2 2 8 using the product keys. Press the P key.



SYSTEM

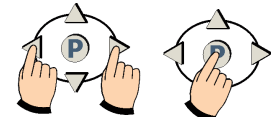
Press the P key.



APPLIANC

GAS
ELEC
GEN

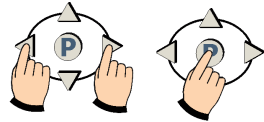
SET APPLIANCE MODE. Use the left and/or right arrow keys to choose Gas, Electric or Generic. Press the P key.



CTRTYPE

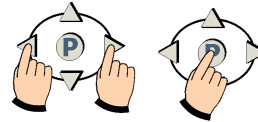
TEMPCTRL
TIMECTRL

SET CONTROL TYPE. Use the left and/or right arrow keys to choose Temperature or Time Control. Press the P key.



TONEVOL

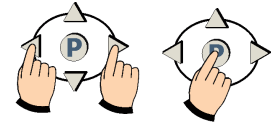
SET TONE VOLUME. Use the left and/or right arrow keys to choose 1, 2, 3, 4 or NONE. Press the P key.



TEMPUNIT

F
C

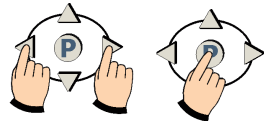
SET TEMPERATURE SCALE. Use the left and/or right arrow keys to choose Fahrenheit (F) or Celsius (C). Press the P key.



PREHEAT

YES
NO

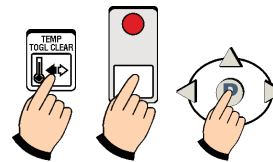
SET PREHEAT MODE. Use the left and/or right arrow keys to choose Yes or No. Press the P key.



SETBTIME
COOLTIME

XX:XX

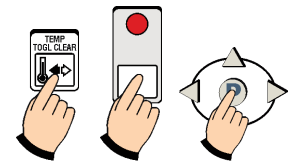
PROGRAM SET BACK TIME. Actual set time will be displayed. To change, press toggle clear to change the time to zero. Type in a new time using the product keys. Press the P key.



SETBTEMP
COOLTEMP

XXXF

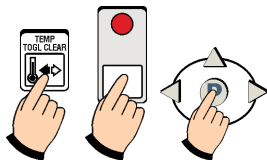
PROGRAM SETBACK TEMPERATURE. Actual set temperature will be displayed. To change, press toggle clear to change the temperature to zero. Type in a new temperature using the product keys. Press the P key.



FILTRCNT

X

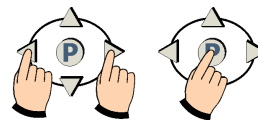
SET FILTER COUNT. Actual filter count will be shown (1-99). To change, press toggle clear to change the count to zero. Type in a new filter count using the product keys. Press the P key.



COOKUNIT

MM:SS
HH:MM

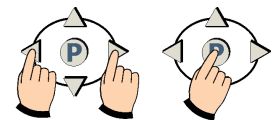
SET COOK TIME UNIT. Use the left and/or right arrow keys to choose Minutes/Seconds or Hours/Minutes. Press the P key.



HOLDUNIT

MM:SS
HH:MM

SET HOLD UNIT. Use the left and/or right arrow keys to choose Minutes/Seconds or Hours/Minutes. Press the P key.



SYSTEM

EXIT SYSTEM PROGRAMMING MODE. Press the up arrow key.



EXIT

Press the P key.



READY

You have now EXITED System Programming Mode and can operate the controller.

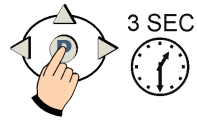
SYSTEM 3228 STORE MANAGER



Offset Temperature can be set from 20 to -20F (-6.6 to -28.8C).

ENTER OFFSET PROGRAMMING MODE.

Press and hold the P key for 3 seconds.



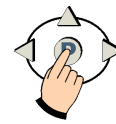
COUNTS

Press the down arrow key.



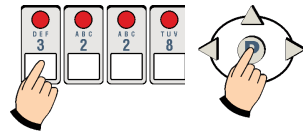
PROGRAM

PROGRAM will be displayed. Press the P key.



CODE

Type in 3 2 2 8 using the product keys. Press the P key.



SYSTEM

Press the down arrow key UNTIL Offset is displayed.



OFFSET

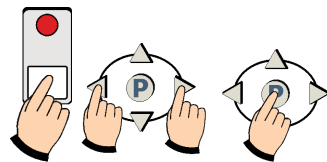
Press the P key.



XXF

XXC

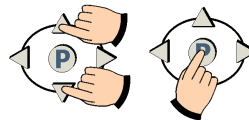
Use the product keys to enter a new offset temperature. to change from negative to positive, use the left and right arrow keys. Press the P key.



OFFSET

EXIT OFFSET PROGRAMMING MODE.

Press the up or down arrow keys to scroll to EXIT. Press the P key.



EXIT

Press the P key.



READY

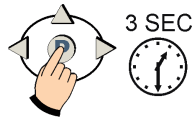
You have now EXITED Offset Programming Mode and can operate the controller.

Programming Custom Product & Action Alarm Names to the Library

SYSTEM 3228 STORE MANAGER

ENTER LIBRARY PROGRAMMING MODE.

Press and hold the P key for 3 seconds.



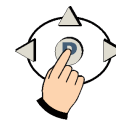
COUNTS

Press the down arrow key.



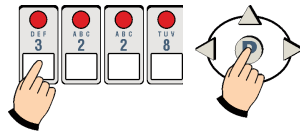
PROGRAM

PROGRAM will be displayed. Press the P key.



CODE

Type in 3 2 2 8 using the product keys. Press the P key.



SYSTEM

Press the down arrow key to select either PRODLIBR OR ALRMLIBR.



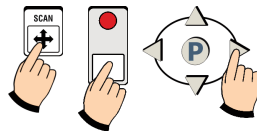
PRODLIBR

ALRMLIBR

Choose either PRODLIBR (Product Library) or ALRMLIBR (Action Alarm Library) by pressing the P key.



A flashing dash will be displayed. Press the SCAN key and use the product keys to spell a new word. Press the right arrow key to advance to the next character position.



Continue spelling the word. When done, press the P key.



TO SAVE WORD, press P again. Skip to Exit Library Programming.



TO CANCEL OR MODIFY, see next step.

ADD

CANCEL

MODIFY

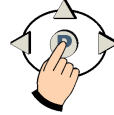
TO CANCEL OR MODIFY WORD, press the left or right arrow keys to select CANCEL or MODIFY.



IF YOU CHOOSE CANCEL:

CANCEL

Press the P key to EXIT and cancel the word.



PRODLIBR

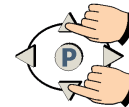
ALRMLIBR

EXIT LIBRARY PROGRAMMING. Press the up or down arrow keys until display reads EXIT.

IF YOU CHOOSE MODIFY:

MODIFY

Press the SCAN key to go back and modify the word.



EXIT

Press the P key.



READY

You have now EXITED Library Programming Mode and can operate the controller.

Troubleshooting

PROBLEM	CAUSE	SOLUTION
No Power	Circuit breaker OFF	Check and reset.
	Appliance not plugged in	Plug in cord.
	Defective 24VAC transformer	Replace transformer. Replace controller.
No Sound	Inoperable speaker	Replace controller.
Button Problem	Frozen key	Unplug controller. Hold down the TOGGLE/CLEAR key as you plug controller back in.
	Inoperable key	Replace controller.
PROBE is Displayed	Defective temperature probe	Replace temperature probe
	Probe not plugged in	Plug in probe.
Reading Wrong Temperature	Defective temperature probe	Replace temperature probe.
Not Heating	Defective element, relay, contactor or gas valve	Replace defective part.
	Defective controller	Replace controller.

Parts & Accessories

DESCRIPTION	(FAST.) PART NUMBER
Sheet Metal Bezel (Mini) – Black	214-50291
Sheet Metal Bezel (Maxi) – Stainless	214-52701
Slotted Round Head Screw, 1/4-20 x 3/4" – Black	150-10202
Slotted Round Head Screw, 1/4-20 x 3/4" – Stainless	150-10188
Tinnerman Spring Nut 1/4-20	150-11025



(FASTRON.) Meridian Series Cooking Controllers

Want to learn more about FAST products?

Visit our Web site:

www.fastinc.com

Customer Service and Technical Assistance

Our customer service department is available for orders and questions Monday through Friday between the hours of 8 AM and 5 PM EST. Call us toll-free at **1-800-FASTRON** (800-327-8766) if you're in the US, Canada or the Caribbean, or at 203-378-6860 if you're outside of these areas.

Toll-free technical assistance is available 24 hours a day, 365 days a year by calling **1-800-243-9271** (from the U.S., Canada and the Caribbean) when help is needed immediately.

You can also send an instant email message to a FAST technician, Monday through Friday, 8am-5pm EST, by going to www.fastinc.com, selecting the 'Support' link at the top of the page, and clicking on 'Contact Tech Support.'

Free Program for Service Exchanges

FAST provides an Exchange Program, at no extra cost, if a unit should fail. In the event of failure, you have the option of (1) receiving a replacement product from our factory, freight prepaid; (2) exchanging the failed product for a replacement product at one of our authorized local service centers; or (3) selecting on-site repair or replacement of the failed unit by one of our authorized local service centers.

To take advantage of this program, simply call our toll-free customer service number, 1-800-243-9271. If you elect to receive an exchange unit from the factory, a replacement unit will be sent immediately. Upon receipt of the replacement unit, simply return the failed unit to the factory, freight prepaid, using the same carton and packing material in which the replacement unit was shipped. The unit will be replaced free of charge, if still under warranty, and if the product shows no evidence of abuse or alteration. If the unit is not under warranty, you will pay repair charges and shipping costs to and from the factory.

Any minor adjustment or calibration and any labor costs for the replacement of probes will be made at your expense.

The FAST Exchange Program is available to any FAST Domestic Customer whose account is current, and applies to all FAST Timers, Computers and Controllers.



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229-51319

(FAST.)®

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WARRANTY

FAST warrants all new timers, computers, and controllers for 1 year from the date of purchase including computers, controllers, and timers. FAST warrants all other items for a period of 90 days unless otherwise stated at the time of purchase.

PATENTS

The products manufactured by FAST are protected under one or more of the following U.S. Patents:

5,331,575	5,539,671	5,711,606	5,723,846
5,726,424	5,875,430	6,142,666	6,339,930
6,401,467	6,505,546	6,581,391	7,015,433

7,650,833
Plus foreign patents and patents pending. Plus licensed patent 5,973,297

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