Operating & Programming Instructions

IM-2000™
8 Product Cooking Controller

"Serving Those Who Serve The Very Best"
INTRODUCTION

Thank you for your purchase. You have chosen a product with over 25 years of innovation and quality manufacturing behind it. The IM-2000 Cooking Controller is designed to simplify the operation of your appliance and allow your foodservice operators to spend more time with the customers and other important responsibilities. Quality control of your food product is assured through the various features, notification displays and alarms designed into all SCS Controllers.

There are three modes of operation on the IM-2000 Cooking Controller:

- **Operating Mode**: used to cook the various menu items
- **Product Programming Mode**: used to add or modify menu items
- **System Programming Mode**: used to configure the controller to various applications

**NOTE**: Not all features are available on all models.
CONTROLLER KEY DESCRIPTIONS

When lit (bright) indicates that a product hold time is being tracked.

When lit (bright) indicates the controller is calling for heat.

When lit (bright) indicates the controller is in melt cycle.

When lit (bright) indicates the controller is in program mode.

In "operating" mode, displays the remaining cook time on every product key currently in a cook cycle and lights the respective product's LED for 2 seconds each.

In "programming" mode, steps to the next function to be programmed.

Optional "soft" ON/OFF key switches controller functions off while leaving power to the appliance on.

Optional "soft" ON/OFF key—available for dual vat fryers.

In "operating" mode, used to view remaining hold times.

In "operating" mode, displays the actual temperature followed by the programmed or set temperature.

In "programming" mode, allows the user to toggle between choices in an entry field and clear values from a data field.

In "programming" mode, used to accept the information and "enter" it into the controller's memory.
OPERATING THE CONTROLLER

Starting a Cook Cycle

To start a cook cycle, simply press the product key for the product you wish to cook. If the product key is programmed, the correct cooking time will be displayed (example) and this time will immediately start to count down in minutes and seconds. The pressure solenoid will also close if programmed to do so. If is displayed immediately and the unit starts to signal, the key being operated is not programmed. If correctly programmed, it will count down to followed by and start to signal.

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

Action Alarms

If the unit is programmed with action alarms, the action alarms will signal at a preset time during the cooking cycle; for example, . This signal, a dual rhythm beeping, will last 5 seconds and then self-cancel. The display will flash the action alarm time and the unit will then start counting toward .

Holding Timers

If the unit 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 will be lit. To view all active hold times, press and hold the key. Upon expiration, the timer will display and pulse with an audible tone.
OPERATING THE CONTROLLER

Holding Timers, continued

To cancel, press the key.

To view the hold time with the least amount of time remaining, press the key.

Boil

CAUTION: PLEASE CONSULT AND FOLLOW KEATING’S GUIDELINES FOR CLEANING AND BOILING OF THE FRY VATS. 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 shortening. Once the vat is emptied of shortening and refilled with cold water, the controller and fryer may now go into boil.

To Enter Boil Mode:

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

Note: The fry vat must be below a temperature of _____°F/_____°C to enter the boil mode.

To Exit Boil Mode:

The controller will no longer have [boil] in the display. Turn the appliance off. Empty the water from the vat, wipe all remaining water from the vat. Once dry, refill the vat with shortening.

CAUTION: Refill the vat with shortening ONLY when it is completely dry.
NOTE: Not all features are available on all models.

DISPLAY DESCRIPTIONS

Lo
The unit is in the Operating Mode. The actual vat temperature is more than 10 degrees below the programmed vat temperature.

Hi
The unit is in the Operating Mode. The actual vat temperature is more than 40 degrees above the programmed vat temperature. An audible alarm sounds simultaneously.

Probe
The controller probe is either open or shorted; accompanied with an audible alarm. Check or replace the probe.

230
The unit is in the Operating Mode and a cook cycle is in process.

donE
The unit is in the Operating Mode and a cook cycle has been completed.

Code
The unit is waiting for a pass code to be entered.

Prod
The unit is in the Product Key Programming Standby Mode.

T1
A cooking time is displayed.

e1
A cooking temperature is displayed.

eCI
A timing mode (flex or straight) is displayed.

PrE
Product key action alarm programming standby mode.

PrE1
The action alarm status is displayed.

Sys
The unit is in System Programming Standby Mode.

dEG
The unit is in Fahrenheit or Celsius Programming mode.

Ctrl
The unit is in Controller Backup Programming mode.

PrHT
The unit is in Fryer Preheat or Melt Cycle Programming mode.

APPL
The unit is in the Appliance Type Programming mode.
CONTROLLER FEATURES

Fahrenheit or Celsius Temperature Display
The operator will have the ability to configure the controller to display the temperature in degrees Fahrenheit or Celsius from the System Programming mode.

Melt Cycle
When the computer is ON and the vat temperature is below the Melt Limit Temperature, the controller will control the melting of the shortening.

Programmable Times
The operator will have the ability to program the cook times for each product key. The controller is programmable in minutes (up to 59) and seconds (up to 59).

Programmable (FASTFLEX.)™ Timing Mode
The operator will be able to program the timing mode (flex or straight) for each product key. If a product is configured for flex time, the controller 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, to insure the controller provides consistent, high-quality product. Under straight time mode, the controller will cook only for the specified time without adjusting for these variations.

Programmable Action Alarms
The operator will be able to program one action alarm on each product key. An action alarm is an indication to the operator to perform some action at a pre-programmed time.
PROGRAMMING THE CONTROLLER

PROGRAMMING NOTES:

1. 16 button units have 2 displays that show a full line of information;
   for example: **TIME 1200**.
2. 8 button units have a single, dual-purpose display that will alternate information;
   for example: **TIME** (and then) **1200**. (This manual shows only 8 button units.)

SCAN advances you to the next setting for the same function. ENTER completes programming for that function and advances you to the next function.

Entering Programming Mode

Press

```
1
7
2
4
ENTER
```

Display

```
Code
-----
-----
-----
-----
Prod
```

- The controller is now in Product Key Programming Standby Mode.

Programming a Product Key Cook Time

Press

```
1
ENTER
```

Display

```
Prod
---
TIME
:0
1:200
TC
```

select any product key

currently programmed time is displayed

to change cook time

enter a new product cook time

New product cook time is entered. You may now program flex or straight time operation for that product key.
PROGRAMMING THE CONTROLLER

Programming Flex or Straight Time Operation

Press

Display

FL FL FL

to toggle between choices
(See note below before continuing.)

Flex or straight time option is now entered. You may now program action alarm times.

Programming Action Alarm Times

Press

Display

Prod PrE I PrE pr:3

press any product key
currently programmed action alarm time is displayed
to change action alarm time
enter new action alarm time
to keep new action alarm time
PROGRAMMING THE CONTROLLER

Programming Hold Times

Press

Display

NOTE: Up to 4 hold timers can be programmed per product key on the 8 button controller; up to 8 hold timers can be programmed per product key on the 16 button controller.

Programming Cook Temperature

Press

Display

Exiting Programming Mode

Press

Display

Press PROG when any of these functions are displayed.
PROGRAMMING THE CONTROLLER

Entering System Programming Mode

Press

Display

• The controller is now in System Programming Standby Mode.

Programming Fahrenheit or Celsius Temperature Display

Press

Display

Programming Operating Mode (Controller or Timer)

Press

Display
PROGRAMMING THE CONTROLLER

Programming Appliance Type

Press

Display

current appliance type is displayed to keep displayed appliance type; and advance to “Programming Preheat Option”
toggle between three appliance configurations for size of fryer or power type; for example:
ELEC — Electric Fryer
GAS — Gas Fryer
GEN — Generic Option Selected*

*D This display may differ depending on custom configuration of the controller.

Programming Preheat Option

Press

Display

current preheat option is displayed to keep preheat option choice
toggle between YES — Melt Cycle Enabled, or NO — Melt Cycle Override

DANGER: Melt Cycle override should NOT be used with solid shortening. Misuse could result in personal injury.
PROGRAMMING THE CONTROLLER

Exiting System Programming

Press

Display

The controller is now in Operating Standby Mode.

One of these displays will appear.
**Warranty Statement**

Keating of Chicago, Inc. provides a limited one-year warranty for its products (except probes and hoses for which the period is 90 days). A copy of the exact provisions of this warranty and the other terms and conditions of sale are available upon request.

**Controller Operating Environment**

PLEASE NOTE: 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.

**Patents**

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

4,077,690  4,113,623  4,278,872
4,320,285  4,610,238  4,644,931
4,688,475  4,740,888  4,742,455
4,782,445  4,812,625  4,812,963
4,864,498  4,911,068  4,920,948
4,921,509  4,973,882  5,043,860
5,171,974  5,331,575

Plus foreign patents and patents pending.

Plus licensed patents:

4,437,159  4,549,527  4,663,710
4,858,119
LIMITED WARRANTY

Keating of Chicago, Inc. ("Keating") warrants to the original purchaser ("Customer"), all new Keating Fryers, Filter Systems, Griddles, Keep Krips®, Custom Pasta Systems, Top-Side™ Cookers, Computer Timers, Fryer & Pasta Vessels and Keating replacement parts ("products") installed after June 1, 1994 to be free to defects in material or workmanship, subject to the following terms and conditions.

LENGTH OF WARRANTY

All products other than Fryer & Pasta Vessels and replacement parts shall be warranted for a period of one year from the date of original equipment installation. Replacement parts are warranted for a period of ninety days from the date of installation. Fryer & Pasta Vessels are warranted as described below.

FRYER & PASTA VESSEL WARRANTY

Fryers purchased after June 1, 1994 carry a prorated vessel warranty on defects in materials or workmanship to the Customer based on the following scale:

<table>
<thead>
<tr>
<th>Time from Installation Date</th>
<th>Fryer Vessel Warranty Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-60 months</td>
<td>100%</td>
</tr>
<tr>
<td>61-72 months</td>
<td>80%</td>
</tr>
<tr>
<td>73-84 months</td>
<td>60%</td>
</tr>
<tr>
<td>85-96 months</td>
<td>40%</td>
</tr>
<tr>
<td>97-108 months</td>
<td>20%</td>
</tr>
<tr>
<td>109-120 months</td>
<td>10%</td>
</tr>
</tbody>
</table>

The credit for the defective fryer & pasta vessel shall be applied against the cost of the replacement vessel, utilizing Keating’s then current price, upon return of the vessel to Keating, (freight to be paid by Keating within the first 2 months only), only during the first 60 months, subject to the limitations described below.

LIMITATIONS OF LIABILITY

In the event of warranty claim or otherwise, the sole obligation of Keating shall be the repair and/or replacement at the option of Keating of the product or component or part thereof. Such repair or replacement shall be at the expense of Keating except that the Customer shall pay the following expenses: all freight and labor expenses for Keating replacement parts; for all other products, mileage exceeding 50 miles or travel more than one hour, labor costs of more than one person, overtime rates, truck charges, difference between ground and other mode of transportation, and holiday charges. Any repair or replacement under this Limited Warranty does not constitute an extension of the original warranty for any period for the product or for any component or part thereof. Parts to be replaced under this Limited Warranty will be repaired at the option of Keating with new or functionally identical parts. Keep Krips and Computer Timers must be returned to Keating for warranty repair or replacement. Field repairs of those items are not authorized.

The liability of Keating on any claim of any kind, including claims based on warranty, expressed or implied, contract, negligence, strict liability on any other theories shall be solely and exclusively the repair or replacement of the product as stated herein, and such liability shall not include, and Customer specifically renounces any rights to recover, special, incidental, consequential or other injuries to persons or damage to property, loss of profits or anticipated profits, or loss of use of the product.

If any oral statements have been made regarding the Keating products, such statements do not constitute warranties and are not part of the contract sale. This Limited Warranty constitutes the complete, final and exclusive statement with regard to warranties.

EXCLUSIONS

The warranties provided by Keating of Chicago, Inc. do not apply in the following instances:

1. Defects arising out of or resulting from improper installation or maintenance, abuse, misuse, modification or alteration by unauthorized service personnel, or any other condition not attributable to a defect in material or workmanship. Proper installation and maintenance are the responsibility of the installer and Customer, respectively. Proper installation and maintenance procedures are prescribed by the Keating Service Manual.
2. In the event that the product was damaged after leaving the factory due to flood, fire, other acts of God or accident, damage during shipment should be reported to the carrier and is not the responsibility of Keating.
3. In the event the serial number or rating plate has been removed from the product or altered.
4. On parts which would normally be worn or replaced under normal conditions, including but not limited to electric bulbs, fuses, interior and exterior finishes, gaskets and radiators.
5. With regard to adjustments and calibrations such as leveling, tightening of fasteners or plumbing connections, improper gas pressure or improper electrical supply, the checking of changes in adjustment and calibrations are the responsibility of the installer. Proper installation procedures are prescribed by the Keating Service Manual.
6. In the event of unauthorized repairs or alterations to the Keating product.
7. With the use of sodium chloride in pasta vessels or harsh chemicals in fryer or pasta vessels.
8. Installation in Household.

OTHER TERMS AND CONDITIONS

The Customer must provide proof of purchase from Keating. This Limited Warranty is void in the 50 United States, its territories, and Canada, and is void elsewhere. Keating products are sold for commercial use only. If any Keating product is sold as a component of another product or used as a consumer product, such Keating product is sold As Is without any warranty. If any provision of this Limited Warranty is held to be unenforceable under the law of any jurisdiction, such provision shall be inapplicable in such jurisdiction, and the remainder of the warranty shall remain unaffected. Further, in such event, the maximum exclusion or limitation applicable under applicable law shall be deemed substituted for the unenforceable provision.

This Limited Warranty shall be governed by and construed in accordance with the laws of the State of Illinois.

TO SECURE WARRANTY SERVICE

All repairs under this Limited Warranty must be authorized by Keating or performed at Keating. Authorization may be obtained by calling 1-800-KEATING within the Continental United States, Alaska, Hawaii, Puerto Rico and Canada during normal business hours (8 a.m. through 8 p.m. Central Time, Monday through Friday). When calling, please have the following information available: (1) name, address and telephone number of the Customer; (2) location of product, if different; (3) name, model number and serial number of the product; (4) installation date; and (5) description of defect. Keating will then issue a service authorization work order number to one of its approved independent servicing organizations, or request the product or part be shipped to Keating for repair or replacement, as appropriate. Any defective part subject to a claim under this Limited Warranty must be shipped freight prepaid to Keating for testing and examination. Keating’s decision as to the cause and nature of any defect under this Limited Warranty shall be final.