

USER'S GUIDE

Kitchen Calc™
Model 8300



CALCULATED INDUSTRIES®

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KEY DEFINITIONS

On/C – On/Clear Key

Turns power on. Pressing once clears the display. Pressing twice clears any previously entered value.

Conv On/C – Off

Turns all power off. Clears all non-permanent registers.

Rcl - Recall

Recalls stored values (e.g., **Rcl** **Recipe # Servings**).

0 – **9** and **◐**

Digits used for keying in numbers.

+ **-** **x** **÷** **=**

Arithmetic operation keys.

Conv **÷** – Percent (%)

Four-function percent.

Conv – Convert

Converts to various unit keys (e.g., cooking units, temperature).

Conv **+** – Memory (**M+**)

Adds displayed value to the standard, cumulative Memory. (To subtract from Memory, press a value, then **Conv** **-** **Conv** **+**).

Rcl **+** – Recall Memory

Rcl **Rcl** – Clear Memory

Conv **±** – Change Sign (+/-)

Changes the sign of the displayed value from + to - and vice versa.

Conv **X** – Clear Recipe Memory

Clears the values entered into the # of Servings and Portion Size keys, as these values are stored in Memory (e.g., remain stored even after you turn your calculator off).

Conv **X** **X** – Clear All

Clears all stored values, including Memory, serving and portion sizing.

/ – Fraction Bar Key

Used to enter fractions (e.g., **1** **/** **3** **cup**).

Conv **/** – Rnd +/- (*Remainder*)

Displays the fractional remainder (if applicable), due to calculator rounding. This is an optional calculation and should be used if you want more precise measurements. When the calculator has rounded by more than 5%, the display will read ^Rnd (it has rounded up) or vRnd (rounded down). When this occurs, press **Conv** **/** to display the remainder. A (+) tells you to add the

additional measurement, and a (-) tells you to subtract (e.g., **Conv** **/** = + 0-1/2 TSP means you should add an additional 1/2 Teaspoon of the ingredient).

***Note:** If you want to minimize rounding altogether, convert to the next smallest cooking unit (e.g., if it reads Tablespoons, convert to Teaspoons).*

Timer – Built-in Cooking Timer

Accesses the count up/count down timer.

Cooking Unit Keys

Enters or converts to:

lb – Pounds

dry oz – Dry Ounces

fl oz – Fluid Ounces

cup – Cups

tbsp – Tablespoons

tsp – Teaspoons

2nd Functions - Conversion Units

Enters or converts to:

Conv **0** – g or Gram

Conv **1** – kg or Kilogram

Conv **2** – °C or Celsius

(Cont'd)

(Cont'd)

Conv **3** – °F or Fahrenheit

Conv **4** – Liter

Conv **5** – cl or Centiliter (100 ml)

Conv **6** – ml or Milliliter

Conv **7** – gal or Gallon

Conv **8** – Quart

Conv **9** – Pint

Conv **•** – Dash

Conv **=** – Pinch

Recipe Scaling Keys

Recipe # Servings – **Recipe's Number of Servings**

Enters the recipe's stated number of servings.

Actual # Servings – **Actual Number of Servings**

Enters your desired number of servings.

Conv **Recipe # Servings** – **Recipe's Portion Size**

Enters the recipe's stated per person portion size.

Conv **Actual # Servings** – **Actual Portion Size**

Enters your desired per person portion size.

Adjust Recipe – **Adjust Recipe**

Calculates adjusted ingredient sizes

based on entered number of servings and/or portion size.

Rcl **Adjust Recipe** - **Recipe Scale Factor**

Displays the ratio used for adjusting ingredients.

Note: Values entered in Recipe Scaling Keys are stored permanently, so use **Conv** **X** to clear them. Also, to review stored values, press **Rcl** and the applicable key (e.g. **Rcl** **Recipe # Servings**).

COOKING UNIT CONVERSIONS

Converting cooking or other weight/volume unit measurements is quick and easy. To convert cooking units, enter the quantity, press the cooking unit key/label, and then press the **Conv** key followed by the desired unit of measure key. To enter fractions (e.g., 1/2 Cup), use the **/** key. Also, some units (like Gallons) don't have dedicated keys, but are second functions of primary keys. These are color-labeled over various number/digit or other keys. They can be accessed using the **Conv** key.

Note: It is incorrect to convert volumes to weights and vice versa (weights vary, e.g., a cup of flour weighs less than a Cup of water); thus, the calculator will not allow you to do so. The calculator will display the word "Sorry" if this occurs.

Convert 1-1/2 tsp. to tbsp.:

KEYSTROKE	DISPLAY
1 1 / 2 tsp Conv tbsp	0-1/2 TBSP

Convert 8 fl. oz. to Cups:

KEYSTROKE	DISPLAY
8 fl oz Conv cup	1 CUP

Convert 5-1/2 Quarts to Gallons:

KEYSTROKE	DISPLAY
5 1 / 2 Conv 8 (Quart)	5-1/2 QT
Conv 7 (gal)	1-3/8 GAL

Convert 32 dry oz. to lbs.:

KEYSTROKE	DISPLAY
3 2 dry oz Conv lb	2 LB

Converting Fractions to Decimals

To convert cooking measurement units to and from fraction and decimal values, follow the example below:

Enter 1/3 Cup and convert to Decimal, then back to fraction:

KEYSTROKE	DISPLAY
1 / 3 cup cup	0.333 CUP
cup	0-1/3 CUP

Note: If the value entered is not a “kitchen fraction,” (e.g., 1/3 TBSP) the next press of the cooking unit key (e.g., **tblsp**) will display the rounded “kitchen value” (e.g., 0-1/2 TBSP) and a third press will display the actual decimal value (e.g., 0.333 TBSP).

RECIPE SCALING

One of the most useful features of the **KitchenCalc** is its ability to adjust recipes. It calculates new ingredient amounts when you change the number of servings a recipe makes (e.g., when you want it to serve ten people instead of only four). This allows you to cook or bake with precision by measuring the correct ingredient quantities. The **KitchenCalc** also lets you adjust ingredients when you change a recipe’s portion size (e.g., if you want to serve 4 oz. portions for each person, instead of 6 oz.). See the following examples.

Basic Example

You’d like to make 5 servings of instant brown rice, but the box only lists a measuring chart for 4 servings (2 cups of rice and 1-3/4 Cups of water). How much rice and water do you need for five servings?

(Cont’d)

(Cont'd)

KEYSTROKE

DISPLAY

1) Enter current number of servings:

4 **Recipe #**
Servings

4. Rcp #

2) Enter desired number of servings:

5 **Actual #**
Servings

5. ACT #

3) Enter ingredient amounts and press

Adjust
Recipe :

2 **cup** **Adjust**
Recipe

2-1/2 CUP (rice)

1 **3** **/** **4** **cup** **Adjust**
Recipe

2-1/4 CUP (water)

(You should therefore add 2-1/2 Cups of rice and 2-1/4 Cups of water to make 5 servings)

CHANGING THE NUMBER OF SERVINGS

Increasing Number of Servings

You need your brownie pudding cake recipe to yield 12 servings instead of 8. The recipe contains the following ingredients:

- 1-1/4 Cups flour
- 1-1/2 Cups sugar
- 1/2 Cup unsweetened cocoa powder
- 2 tsp. baking powder
- 3 tbsp. butter or margarine, etc.

Convert the ingredients to 12 Servings:

KEYSTROKE **DISPLAY**

- 1) *Clear recipe Memory:*
Conv X (Clear recipe) **0.**
- 2) *Enter recipe's number of servings:*
8 **Recipe #** **Servings** **8. Rcp #**
- 3) *Enter desired number of servings:*
1 **2** **Actual #** **Servings** **12. ACT #**
- 4) *Enter ingredient measurements and press **Adjust Recipe**:*
1 **1** **/** **4** **cup** **Adjust Recipe** **1-7/8 CUP (flour)**
1 **1** **/** **2** **cup** **Adjust Recipe** **2-1/4 CUP (sugar)**
1 **/** **2** **cup** **Adjust Recipe** **0-3/4 CUP (cocoa)**
2 **tsp** **Adjust Recipe** **3 TSP (baking powder)**
3 **tbsp** **Adjust Recipe** **4-1/2 TBSP**
(butter/margarine)

Decreasing No. of Servings

You'd like to decrease your chicken recipe from six servings to four servings. The recipe contains the following ingredients:

(Cont'd)

(Cont'd)

- 2 tsp. dried rosemary leaves
- 1/2 tsp. salt
- 1/4 tsp. black pepper
- 3/4 lb. carrots, etc.

Convert the ingredients to four servings:

KEYSTROKE	DISPLAY
-----------	---------

1) *Clear recipe Memory:*

Conv X (Clear Recipe)	0.
-------------------------------------	-----------

2) *Enter recipe's number of servings:*

6 Recipe # Servings	6. Rcp #
---	-----------------

3) *Enter desired number of servings:*

4 Actual # Servings	4. ACT #
---	-----------------

4) *Enter ingredient measurements and press **Adjust Recipe**:*

2 tsp Adjust Recipe	1-3/8 TSP (rosemary)
--	-----------------------------

1 / 2 tsp Adjust Recipe	0-3/8 TSP* (salt)
--	--------------------------

1 / 4 tsp Adjust Recipe	0-1/8 TSP* (pepper)
--	----------------------------

3 / 4 lb Adjust Recipe	0-1/2 LB (carrots)
---	---------------------------

There's a small remainder (0.042 of a teaspoon) you can view by pressing **Conv **/**.*

Note: *The displayed values are "kitchen fractions," or rounded fractions. Two more presses of **Adjust Recipe** will display the actual fraction and decimal values, respectively.*

CHANGING THE PORTION SIZE

Increasing Portion Size

You're making a stir-fried beef recipe, which is for six-4 oz. servings. If you want to increase the portion size (per person) from 4 oz. to 6 oz., what are the adjusted ingredients?

- 1 lb. flank steak
- 2 tbsp. Chinese cooking wine
- 1 tbsp. minced garlic
- 2 tsp. soy sauce
- 3/4 cup chicken stock, etc.

Convert the ingredients:

KEYSTROKE	DISPLAY
1) <i>Clear recipe Memory:</i> Conv X (<i>Clear recipe</i>)	0.
2) <i>Enter recipe's portion size:</i> 4 Conv Recipe # Servings	4. Rcp SZ
3) <i>Enter desired portion size:</i> 6 Conv Adjust Recipe	6. ACT SZ
4) <i>Enter ingredient measurements and</i> <i>press</i> Adjust Recipe :	
1 lb Adjust Recipe	1-1/2 LB (<i>flank steak</i>)

(Cont'd)

(Cont'd)

2	tblsp	Adjust Recipe	3 TBSP
			<i>(Chinese cooking wine)</i>
1	tblsp	Adjust Recipe	1-1/2 TBSP
			<i>(garlic)</i>
2	tsp	Adjust Recipe	3 TSP
			<i>(soy sauce)</i>
3	/	4	cup
			Adjust Recipe
			1-1/8 CUP
			<i>(chicken stock)</i>

CHANGING BOTH SERVING AND PORTION SIZE

Decreasing Portion Size and Increasing Number of Servings

You want to decrease your portion size from 6 oz to 4 oz, but increase your number of servings from 4 to 8. What are the adjusted ingredients?

- 1 lb. flank steak
- 2 tbsp. Chinese cooking wine
- 1 tbsp. minced garlic
- 2 tsp. soy sauce
- 3/4 cup chicken stock, etc.

Convert the ingredients:

KEYSTROKE

DISPLAY

1) *Clear recipe Memory:*

Conv **X** *(Clear recipe)* **0.**

2) Enter recipe's number of servings:

4 **Recipe # Servings** 4. Rcp #

3) Enter desired number of servings:

8 **Actual # Servings** 8. ACT #

4) Enter recipe's portion size:

6 **Conv** **Recipe # Servings** 6. Rcp SZ

5) Enter desired portion size:

4 **Conv** **Actual # Servings** 4. ACT SZ

6) Enter ingredient measurements and press **Adjust Recipe**:

1 **lb** **Adjust Recipe** 1-1/3 LB (flank steak)

2 **tbsp** **Adjust Recipe** 2-1/2 TBSP*

(Chinese cooking wine)

1 **tbsp** **Adjust Recipe** 1-1/2 TBSP** (garlic)

2 **tsp** **Adjust Recipe** 2-5/8 TSP (soy sauce)

3 **/** **4** **cup** **Adjust Recipe**
1 CUP (chicken stock)

*Convert to teaspoons (e.g., **Conv** **tsp** = 8 TSP) to avoid the remainder.

Again, convert (Conv** **tsp** = 4 TSP).

Note: To review your stored serving or portion size values, use the **Rcl** key. For example, to recall desired portion size, press **Rcl** **Conv**

Actual # Servings.

TEMPERATURE CONVERSIONS

Convert 30° Celsius to Fahrenheit:

KEYSTROKE	DISPLAY
3 0 Conv 2 (°C)	30. °C
Conv 3 (°F)	86. °F

Convert 100° Fahrenheit to Celsius:

KEYSTROKE	DISPLAY
1 0 0 Conv 3 Conv 2	37.8 °C

BASIC MATH WITH COOKING UNITS

What is 1-3/4 cups + 2-1/3 cups?

KEYSTROKE	DISPLAY
1 3 / 4 cup + 2 1 / 3 cup =	4-1/8 CUP

What is 1/8 tsp. x 6?

KEYSTROKE	DISPLAY
1 / 8 tsp X 6 =	0-3/4 TSP

Find 2 tbsp. ÷ 3:

KEYSTROKE	DISPLAY
2 tbsp ÷ 3 =	0-2/3 TBSP

Note: The results of math calculations will be shown as actual, not rounded, "kitchen fraction" values (see following section for more details).

DISPLAYING ACTUAL FRACTIONS VS. “KITCHEN FRACTIONS”

A unique feature of your calculator is that it will display both actual fractions and “kitchen fractions” during conversions or recipe scaling calculations. That is, if the answer is $\frac{3}{4}$ TBSP, it knows there is no “ $\frac{3}{4}$ ” of a Tablespoon, or measuring spoon, available to measure with; instead, it will show the rounded answer (e.g., 1 TBSP).

For more precise measuring, you can then press the **Conv** **/** keys to display the remainder amount to add or subtract, or simply convert the value to the next lowest cooking unit (e.g., TSP), to avoid the remainder altogether.

If you do not want to view “kitchen” values, you can display actual values by pressing the cooking unit key again.

Important Note: The calculator will tell you when an actual value is displayed by displaying the word “Act.”

AVAILABLE KITCHEN FRACTIONS

“Kitchen Fractions,” or whole units or fractions displayed in recipe scaling calculations or conversions, include:

TABLESPOON	TEASPOON	CUP
1 TBSP	1 TSP	1 CUP
1/2 TBSP	7/8 TSP	7/8 CUP
	3/4 TSP	3/4 CUP
	5/8 TSP	2/3 CUP
	1/2 TSP	1/2 CUP
	3/8 TSP	1/3 CUP
	1/4 TSP	1/4 CUP
	1/8 TSP	1/8 CUP

Note: *1/3 TSP, 2/3 TSP, 1/8 TBSP, 1/4 TBSP, 1/3 TBSP, 3/8 TBSP, 5/8 TBSP, 2/3 TBSP, 3/4 TBSP, 7/8 TBSP, 3/8 CUP and 5/8 CUP are not available kitchen fractions.*

Basic Math – Displaying Actual vs. Kitchen Fractions

Find $5\text{-}1/2$ tbsp. \div 2:

KEYSTROKE	DISPLAY
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5 **1** **/** **2** **tblsp** **÷** **2** **=**

2-3/4 TBSP (*Actual Fraction*)

tblsp **3** TBSP (*Kitchen Fraction*)*

tblsp **2.75** TBSP (*Actual Decimal Value*)

*Here, the calculator rounded up to a measuring spoon value you can actually measure with (as there are no “3/4 tbsp.” size measuring spoons).

Conversions – Displaying Actual vs. Kitchen Fractions

Convert 2-3/4 tbsp to a “kitchen fraction,” actual decimal value, then return to the entered value:

KEYSTROKE	DISPLAY
2 3 / 4 tbsp	2-3/4 Tbsp
tbsp	3 Tbsp (<i>Kitchen Fraction</i>)*
tbsp	2.75 Tbsp (<i>Actual Decimal Value</i>)
tbsp	2-3/4 Tbsp (<i>Actual Fraction</i>)

*Here, the calculator rounded up to a unit you can actually measure with.

USING THE TIMER

Your calculator functions not only as a cooking unit converter and recipe scaler, but also as a kitchen timer. The audible timer counts up and down. See instructions below:

Using the Timer – Press **Timer** to access the built-in timer or timer mode. The timer can be set to count down from 24 hours or less. The timer will count up to 12 hours.

Count Up and Pause Timer – Once in timer mode, press **Timer** again to start counting up. Press it once more to pause or freeze counting. Continue counting by pressing **Timer**.

Count Down and Stop Timer – To set the timer to count down, follow this example: Set the timer for a baking time of 1 hour, 30 minutes:

DESCRIPTION/KEYSTROKE	DISPLAY
Access timer: Timer	0:00:00
Enter 1 hour: 1	0:00:01
Enter 30 min.: 3 0	0:01:30
Enter 0's for sec.: 0 0	1:30:00
Start Timer: Timer	1:30:00

Note: Press **Timer** again to pause counting down. Press it once more to continue.

Clear the Timer Display – Press **On/C**.

Important Note: You must first pause the timer if it's counting, then press **On/C**.

Exit the Timer – To clear and exit the timer mode (once the timer is paused), press **On/C** twice. To exit the timer mode without clearing the timer, press **On/C** only once, or press any non-timer key. Note: If the timer is not cleared, the clock symbol will continue to blink on the display to remind you the timer is running.

Using the Calculator While Timing – You can also use the calculator while timing and it will not interfere with timer operations. To do this, press **On/C** to

exit the timer mode and continue to use calculator functions. To return to the timer mode, press **Timer** again.

Note: *The clock symbol will continue to blink on the display to remind you the timer is running when in “calculator” mode.*

Timer Alarm – After the timer is finished counting up or down, you will hear an audible alarm. To clear the timer alarm, press the **Timer** key.

Timer Reminder and Alarm – If you are in “calculator” mode and do not press a key for 11 minutes, the running timer will be displayed as a reminder. Also, in case you forget the timer, after the timer alarm goes off it will begin counting up for an additional hour, displaying the “+” sign to remind you of the amount of time elapsed since the alarm sounded.

Auto Shut-Off – If the timer is left on after the timing period expires, and you are not using the calculator, the calculator will automatically shut off in:

- Count-down timer: 1 hour, 11 minutes
- Count-up timer: 12 hours, 11 minutes

ERRORS AND RESET

Errors

When an incorrect attempt to convert between liquid measures, dry measures, or temperature occurs, the calculator will display the word "Sorry" for a few seconds before showing the initial value on the display. If an error is displayed, press any key.

Reset

If your calculator's display should ever freeze or "lock up," press Reset, a small hole located above the **dry oz** key, using the end of a paper clip.

ACCURACY

Accuracy: Each calculation is carried out internally to ten digits.

AUTO SHUT-OFF AND BATTERIES

Auto Shut-Off: After 8-12 minutes of non-use.

Batteries Included: Two LR-43 batteries.

Battery-Life: 575 hours of actual use.

To replace the batteries, use a small Phillip's head screwdriver and unscrew the single screw in the center of the battery door, located on the back of the calculator

Carefully remove the battery door, remove the old batteries from the clips and replace them with two new LR-43 batteries. Make sure the positive sides (+) are facing up. Replace the battery door and re-attach the screw.

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Quick Reference Guide

Cooking Conversions:

KEYSTROKE	DISPLAY
On/C On/C	0.
6 tsp Conv tbsp	2 TBSP
Conv cup	0-1/8 CUP

Recipe Scaling:

Your cookie recipe makes 12. You need 36. Find the adjusted ingredient measurements, if the original recipe lists:

- 1-1/2 cups flour
- 1 tsp baking soda
- 3/4 cup brown sugar
- 1/2 cup granulated sugar
- 2-3/4 cups oats, etc.

KEYSTROKE	DISPLAY
Conv X	0.
1 2 Recipe # Servings	12. RCP #
3 6 Actual # Servings	36. ACT #
1 1 / 2 cup Adjust Recipe	4-1/2 CUP
1 tsp Adjust Recipe	3 TSP
3 / 4 cup Adjust Recipe	2-1/4 CUP
1 / 2 cup Adjust Recipe	1-1/2 CUP
2 3 / 4 cup Adjust Recipe	2-1/8 QT

If you'd like to view the answer in cups instead, convert to cups:

Conv cup	8-1/4 CUP
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