## LEARN ABOUT YOUR MICROWAVE OVEN

This section discusses the concepts behind microwave cooking and introduces you to the basics you need to know to operate your microwave oven. Please read this information before using your oven.

# **A**CAUTION

To avoid risk of personal injury or property damage, do not run the oven empty.

To avoid risk of personal injury or property damage, do not use stoneware, large sheets of aluminum foil, metal utensils, or metal trimmed utensils in the oven. Keep aluminum foil at least 1 inch from the oven wall, metal rack and other pieces of foil.

# AUDIBLE SIGNALS

Audible signals are available to guide you when setting and using your oven:

- A beep will sound each time you press a button.
- 4 beeps signals the end of a cooking cycle.

## INTERRUPTING COOKING

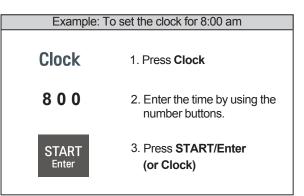
You can stop the oven during a cycle by opening the door. The oven stops heating and the fan stops, but the light stays on.

To restart cooking, close the door and press START/Enter.

If you do not want to continue cooking, open the door and press STOP/Clear.

#### CLOCK

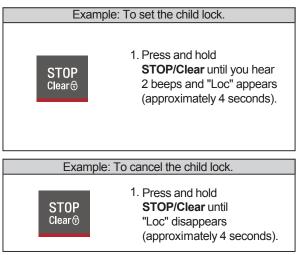
When the oven is first plugged in or after a power failure, the display will show " : " . If a time of day is not set, " : " will show on the display until you press "Clock".



**NOTE:** If **PM** does not appear in the display, the clock is seted to AM. To set the clock to PM, press **Clock** twice or until **PM** appears in the display. Then press **START**.

## CHILD LOCK

Use this safety feature to lock the control panel when you are cleaning the oven, or so that children cannot use the oven unsupervised.



## COOKTOP LIGHT

The button on the bottom left of the control panel controls the cooktop light.

Example:	Example: To set the Lamp for ON		
Light On/Off	1. Press Light On/Off.		
Light	To turn on, press once. "Light" will flash in display, then stay on.		
On/Off	2. Press Light On/Off.		
	To turn off, press button again. "Light" will disappear from the display.		

## **ENERGY SAVING**

The **Energy Saving** feature saves energy by turning off the display by pressing the Energy Saving button. The display will automatically turn off after 5 minutes of idleness if the clock has not been set.

If the clock has been set, then the display will not automatically turn off.



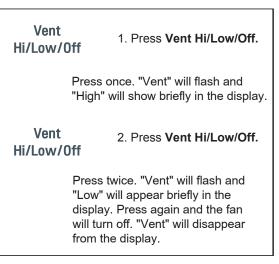
## TURNTABLE ON/OFF

For best cooking results, leave the turntable on. It can be turned off for large dishes. Press **Turntable On/Off** button to turn the turntable on or off. **NOTES:** 

- 1. This option is not available in sensor cook, defrost, soften and melt modes.
- Sometimes the turntable can become hot to touch. Be careful when touching the turntable during and after cooking.
- 3. Do not run the oven when empty.

## VENT HI/LOW/OFF

The vent removes steam and other vapors from the surface cooking area. Press Vent once for High fan speed, twice for Low fan speed, or three times to turn the fan off.



**NOTE:** Turn the microwave's vent fan on whenever you use the oven range cooktop below it. The fan captures smoke, steam, and odors and also prevents the heat from the cooktop from damaging microwave components.

If the microwave is cooking, the vent fan turns on automatically if the sensors detect too much heat from the cooktop. This is normal, and is designed to prevent microwave component damage.

## ADD 30 SEC

A time-saving button, this simplified control lets you quickly set and start microwave cooking without the need to press **START/Enter**.

Exaple: To set ADD 30 SEC for 2 minutes.

Add 30 Sec. Press **Add 30 Sec.** 4 times. The oven begins cooking and the display shows time counting down.

**NOTE:** If you press **Add 30 Sec.**, it will add 30 seconds up to 99 min 59 seconds.

#### COOKING AT HIGH COOK POWER



## MICROWAVE POWER LEVELS

This feature lets you program a specific cook time and power. For best results, there are 10 power level settings in addition to HIGH (100%) power . Refer to the "Cooking Guide for Lower Power Levels" on page 13 for more information.

NOTE: If you do not select a power level, the oven will automatically cook at HIGH (100%) power.

Example: To coo 80% power.	Example: To cook for 5 minutes, 30 seconds at 80% power.		
530	1. Enter cook time.		
Power Level	2. Press <b>Power Level</b> .		
8	3. Enter the power level.		
START Enter	4. Press <b>START/Enter</b> . When the cook time is over, four beeps will sound and <b>End</b> will display.		

## MULTI-STAGE COOKING

For best results, some recipes call for different power levels during different stages of a cook cycle. You can program your oven to switch from one power to another for up to 2 stages. 3 stages can be programmed if the first stage is the defrost cycle.

Example: To cook food for 3 minutes at 100% power and then 70% power for 7 minutes 30 seconds.			
300	1. Enter the first cook time.		
Cook Time	2. Press Cook Time.		
730	3. Enter the second cook time.		
Power Level	4. Press <b>Power Level</b> .		
7	5. Enter the power level.		
START Enter	6. Press START/Enter.		
When the cook time is over, four beens			

When the cook time is over, four beeps will sound and End will display.

## **MORE / LESS**

By using the More or Less buttons, all of the preprogrammed features like Cook can be adjusted to cook food for a longer or shorter time.

Pressing More will add 10 seconds to the cooking time each time you press it. Pressing Less will subtract 10 seconds from the cooking time each time you press it.

#### **COOKING GUIDE FOR LOWER POWER LEVELS**

The 10 power levels in addition to HIGH allow you to choose the best power level for the food you are cooking. Below are listed all the power levels, examples of foods best cooked at each level, and the amount of microwave power you are using.

POWER LEVEL	MICROWAVE OUTPUT	USE
10 High	100%	<ul> <li>Boil water</li> <li>Cook ground beef</li> <li>Make candy</li> <li>Cook fresh fruits and vegetables</li> <li>Cook fish and poultry</li> <li>Preheat browning dish</li> <li>Reheat beverages</li> <li>Cook bacon slices</li> </ul>
9	90%	<ul> <li>Reheat meat slices quickly</li> <li>Saute onions, celery, and green pepper</li> </ul>
8	80%	<ul><li>All reheating</li><li>Cook scrambled eggs</li></ul>
7	70%	<ul> <li>Cook breads and cereal product</li> <li>Cook cheese dishes, veal</li> <li>Cook cakes, muffins, brownies, cupcakes</li> </ul>
6	60%	<ul> <li>Cook pasta</li> </ul>
5	50%	<ul> <li>Cook meats, whole poultry</li> <li>Cook custard</li> <li>Cook whole chicken, turkey, spare ribs, rib roast, sirloin roast</li> </ul>
4	40%	<ul> <li>Cook less tender cuts of meat</li> <li>Reheat frozen convenience foods</li> </ul>
3	30%	<ul> <li>Thaw meat, poultry, and seafood</li> <li>Cook small quantities of food</li> <li>Finish cooking casseroles, stews, and some sauces</li> </ul>
2	20%	<ul> <li>Soften butter and cream cheese</li> <li>Heat small amounts of food</li> </ul>
1	10%	<ul><li>Soften ice cream</li><li>Raise yeast dough</li></ul>
0	0%	<ul> <li>Standing time</li> </ul>

#### SENSOR OPERATING INSTRUCTIONS

Sensor Cook allows you to cook most of your favorite foods without selecting cooking times and power levels. The display will indicate the sensor category during the initial sensing period. The oven automatically determines the required cooking time for each food item.

When the internal sensor detects a certain amount of humidity coming from the food, it will tell the oven how much longer to heat. The display will show the remaining heating time. For best results when cooking by Sensor, follow these recommendations:

- 1. Food cooked with the Sensor system should be at normal storage temperature.
- 2. The glass tray and the outside of the container should be dry to assure best cooking results.
- 3. Foods should always be covered loosely with microwavable plastic wrap, waxed paper, or a lid.
- 4. Do not open the door or press STOP/Clear during the sensing time. When sensing time is over, the oven beeps twice and the remaining cooking time will appear in the display window. At this time you can open the door to stir, turn, or rearrange the food.

## SENSOR COOKING GUIDE

Appropriate containers and coverings help to assure good Sensor cooking results.

- 1. Always use microwavable containers and cover them with lids or vented plastic wrap.
- Never use tight-sealing plastic covers. They can prevent steam from escaping and cause food to overcook.
- 3. Match the amount to the size of the container. Fill containers at least half full for best results.
- 4. Be sure the outside of the cooking container and the inside of the microwave oven are dry before placing food in the oven. Beads of moisture turning into steam can mislead the sensor.

## SENSOR POPCORN

Sensor **Popcorn** lets you pop 2.0, 3.0 and 3.5 ounce bags of commercially packaged microwave popcorn. Pop only one package at a time. If you are using a microwave popcorn popper, follow manufacturer's instructions.

#### Example: To pop popcorn.

1. Press Popcorn.

Popcorn

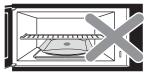
- 2. Press **START/Enter**. When the cook time is over, four beeps will sound and **End** will display.
- Recommended amounts: 2.0 3.5 oz.

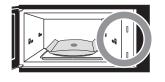
# 

DO NOT leave the microwave oven unattended while popping corn.

When popping commercially packaged popcorn, remove the rack from the oven. Do not place the bag of microwave popcorn on the rack or under the rack.

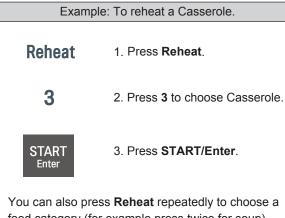






## SENSOR REHEAT

**Reheat** lets you heat foods without needing to program times and Power Levels. **Reheat** has preset Power Levels for 6 categories. See the details in the cooking guide table.



food category (for example, press twice for soup). See Cooking Guide for Sensor Reheat table below for info. When the cook time is over, you will hear four beeps and **End** will display.

## SENSOR COOK

Using **Cook** lets you heat common microwaveprepared foods without needing to program times and Cook Powers. Sensor **Cook** has preset Power Levels for 13 food categories. See the details in the cooking guide table.



## **COOKING GUIDE FOR SENSOR REHEAT**

CODE (Press times)	CATEGORY	RECOMMENDED AMOUNTS	DIRECTIONS	
1	DINNER PLATE	1 ~ 2 servings	Place food on a plate. Cover with vented plastic wrap. Let stand 3 minutes after heating.	
2	SOUP/SAUCE	1 ~ 4 cups	Place in shallow microwavable casserole. Cover with vented plastic wrap. Let stand 3 minutes after heating.	
3	3 CASSEROLE 1 ~ 4 cups		Place in a microwaveable bowl or casserole. Cover with vented plastic wrap. Let stand 3 minutes.	
4	<b>4 PIZZA</b> 1 ~ 3 slices		This is a reheat function for leftover pizza. Place on paper towel on a microwave safe plate.	
5	5 BAKED 1 ~ 4 ea.		Place on a paper towel. Do not cover.	
6	6 TEA 1 ~ 2 cups (240ml per cup)		Use a mug or microwave-safe cup with no cover. Stir after reheating.	

#### **COOKING GUIDE FOR SENSOR POPCORN**

CATEGORY	RECOMMENDED AMOUNTS	DIRECTIONS	
POPCORN	2.0 - 3.5 oz.	Sensor Popcorn lets you pop commercially packaged microwave popcorn. Pop only one package at a time. For best results, use a fresh bag of popcorn. Place a bag of prepackaged microwave popcorn on the center of the glass tray.	

#### **COOKING GUIDE FOR SENSOR COOK**

CODE (Press times)	CATEGORY	RECOMMENDED AMOUNTS	DIRECTIONS	
1	FRESH VEGETABLE (Hard)	1 ~ 4 cups	Place in a microwaveable bowl or casserole. Add water according to the quantity * 1-2 cups: add 2 tbsp water. * 3-4 cups: add 4 tbsp water.	
2	FRESH VEGETABLE (Soft)	1 ~ 4 cups	Cover with vented plastic wrap. Let stand 3 minutes after cooking. Hard vegetables : Carrot, Beet etc. Soft vegetables : Cauliflower, Broccoli, Spinach etc.	
3	FROZEN VEGETABLE	1 ~ 4 cups	<ul> <li>Place in a microwaveable bowl or casserole.</li> <li>* 1-2 cups: add 2 tbsp water.</li> <li>* 3-4 cups: add 4 tbsp water.</li> <li>Cover with vented plastic wrap. Let stand 3 minutes.</li> </ul>	
4	CANNED VEGETABLE	1 ~ 4 cups	Transfer vegetables from the can to a microwaveable bowl or casserole. Cover with vented plastic wrap. Stir thoroughly after cooking.	
5	BAKED POTATO	1 ~ 4 ea (approx.8 - 10 oz. each)	Pierce skin with a fork and place on paper towel. Do not cover. Let stand 5 minutes after cooking.	
6	RICE	½ ~2 cups	Add twice as much water as you have rice (add 2 cups water to 1 cup rice). Place in a microwaveable bowl large enough to prevent the water from boiling over. Cover with vented plastic wrap. Let stand 5 minutes after cooking.	
7	FROZEN LASAGNA	10 ~ 21 oz.	Remove from outer display package. Slit cover. If not in microwave-safe container, place on a microwaveable plate and cover with vented plastic wrap.	
8	FISH FILLET	4 ~16 oz.	Place fish fillets in a single layer and cover with vented plastic wrap.	
9	SHRIMP	4 ~16 oz.	Place shrimp in a single layer and cover with vented plastic wrap.	
10	CHICKEN PIECES	16 ~32 oz.	Place chicken pieces with skin side up and cover with vented plastic wrap.	
11	GROUND MEAT	4 ~ 16 oz.	Cover with plastic wrap. Stir thoroughly after cooking.	
12	CASSEROLE	1 ~ 4 cups	Place in a microwaveable bowl or casserole. Cover with vented plastic wrap. Let stand 3 minutes after cooking.	
13	BOILING WATER	1 ~ 2 cups (240ml per cup)	Use a wide-mouth mug. Do not cover. (Be careful! The beverage will be very hot! Sometimes liquids heated in cylindrical containers will splash out unexpectedly when the cup is moved.)	

#### TIMER ON/OFF

You can use your microwave oven as a timer. Use the Timer for timing up to 99 minutes, 99 seconds.

Example	e: To count 3 minutes.		
Timer <sub>On/Off</sub>	1. Press Timer On/Off.		
300	2. Enter the time by using the number buttons.		
START Enter	3. Press <b>START/Enter</b> . When the time is over, the oven will beep twice continuously until you press the <b>Timer</b> button.		

NOTE: To turn off the Timer while it is still running, press the  $\ensuremath{\text{Timer}}$  button.

## HOLD WARM

You can keep cooked food warm in your microwave oven for up to 90 minutes. You can use **Hold Warm** by itself or to follow a cooking cycle automatically.

Exam	Example: To use Hold Warm.			
Hold Warm	1.Press Hold Warm			
START Enter	2.Press START/Enter.			

#### NOTES:

- Hold Warm operates for up to 90 minutes.
- Food cooked covered should be covered during Hold Warm.
- Pastry items (pies, turnovers, etc.) should be uncovered during Hold Warm.
- Complete meals kept warm on a dinner plate can be covered during Hold Warm .

Food Type	Recommended Quantity		
Liquid	1 - 2 cups		
Dry	5 - 10 oz.		

#### To make Hold Warm automatically follow another cycle:

- While you are programming the cooking instructions, touch **Hold Warm** before pressing **START/Enter**.
- When the last cooking cycle is over, you will hear two beeps and **Hold Warm** will appear in the oven display.
- You can set **Hold Warm** to follow **Auto Defrost**, or multi-cycle cooking.

#### SOFTEN

The oven uses low power to soften foods (butter, ice cream, cream cheese, and frozen juice.) See the following table.

Example: T	Example: To soften quart of ice cream.			
Soften	1. Press <b>Soften</b> twice to choose Ice Cream.			
2	2. Choose food amount. Press <b>2</b> to choose quart.			
START Enter	3. Press START/Enter.			

#### SOFTEN TABLE

Catagory	Press	Press button number		
Category	times	1	2	3
Butter	1	1 stick	2 sticks	3 sticks
Ice Cream	2	Pint	Quart	Half gallon
Cream Cheese	3	3 oz.	8 oz.	-
Frozen Juice	4	6 oz.	12 oz.	16 oz.

## MELT

The oven uses low power to melt foods (butter or margarine, chocolate, marshmallows, or processed cheese food.) See the following table.



#### MELT TABLE

Category	Press Times	Press button number		
		1	2	3
Butter/Margarine	1	1 stick	2 sticks	3 sticks
Chocolate	2	4 oz.	8 oz.	-
Cheese	3	8 oz.	16 oz.	-
Marshmallows	4	5 oz.	10 oz.	_

#### SOFTEN TABLE

PRESS TIMES	CATEGORY	START TEMP.	DIRECTION	AMOUNT
1	Butter	Refrigerated	Unwrap and place in a microwave safe dish on the rack over the glass tray. Butter will be at room temperature and ready for use in a recipe.	1, 2 or 3 sticks (4 oz. / 1 stick)
2	Ice Cream	Frozen	Place in a microwave safe dish on the rack over the glass tray. Ice cream will be soft enough to make scooping easier.	Pint, Quart, Half gallon
3	Cream Cheese	Refrigerated	Unwrap and place in a microwave safe dish on the rack over the glass tray. Cream cheese will be at room temperature and ready for use in a recipe.	3 or 8 oz.
4	Frozen Juice	Frozen	Remove top. Place in oven. Frozen juice will be soft enough to mix easily with water.	6, 12 or 16 oz.

#### MELT TABLE

PRESS TIMES	CATEGORY	START TEMP.	DIRECTION	AMOUNT
1	Butter or Margarine	Refrigerated	Unwrap and place in a microwave safe dish on the rack over the glass tray. No need to cover butter. Stir at the end of cooking to complete melting.	1, 2 or 3 sticks (4 oz. / 1 stick)
2	Chocolate	Room Temp.	Chocolate chips or squares of baking chocolate may be used. Unwrap squares and place in a microwave safe dish on the rack over the glass tray. Stir at the end of cycle to complete melting.	4 or 8 oz.
3	Cheese	Refrigerated	Use processed cheese food only. Cut into cubes. Place in a single layer in a microwave safe dish on the rack over the glass tray. Stir at the end of cooking to complete melting.	8 or 16 oz.
4	Marshmallows	Room Temp.	Large or miniature marshmallows may be used. Place in a microwave safe dish on the rack over the glass tray. Stir at the end of cycle to complete melting.	5 or 10 oz.

## **DEFROST WEIGHT / TIME**

Five defrost choices are preset in the oven. The Defrost feature provides you with the best defrosting method for frozen foods, because the oven automatically sets the defrosting times for each food item according to the weight you enter. For added convenience, the Defrost feature includes a built-in tone mechanism that reminds you to check, turn over, separate, or rearrange the food during the defrost cycle. Four different defrosting presets are provided, plus the option to set your own defrost time.

- 1. Meat
- 2. Poultry
- 3. Fish
- 4. Bread
- 5. Set Time

Press **Defrost Weight/Time** multiple times to select the category you want. Then enter weight. Available weight ranges for Meat, Poultry, and Fish are 0.1 to 6.0 lbs. The available weight range for Bread is 0.1 to 1.0 lb.

Example : To defrost 1.2 lbs. of meat.

<b>Defrost</b> Weight/Time	1. Press <b>Defrost Weight/Time</b> once to choose the Meat category.
12	2. Enter the weight.
START Enter	3. Press START/Enter.

**NOTE:** After you press **START/Enter**, the display counts down the defrost time. The oven will beep once during the defrost cycle. At this time, open the door and turn, separate, or rearrange the food as needed. Remove any portions that have thawed, then return the frozen portions to the oven and press **START/Enter** to resume the defrost cycle. **The oven will not stop following the beep unless the door is opened.** 

#### For best results:

- Remove fish, shellfish, meat, and poultry from its original closed paper or plastic package (wrapper). Otherwise, the wrap will hold steam and juice close to the foods, which can cause the outer surface of the foods to cook.
- Form the meat into the shape of a doughnut before freezing. When defrosting, scrape off thawed meat when the beep sounds and continue defrosting.

- Place foods in a shallow glass baking dish or a on a microwave roasting rack to catch drippings.
- Foods should still be somewhat icy in the center when removed from the oven.

#### **DEFROST TABLE**

CATEGORY	FOOD	
<b>DEF 1</b> <b>1. Meat</b> 0.1 to 6.0 lbs. (45 g to 2.7 kg)	Beef Ground beef, Round steak, Cubes for stew, Tenderloin steak, Pot roast, Rib roast, Rump roast, Chuck roast, Hamburger patty. Lamb Chops (1-inch thick), Rolled roast Pork Chops (1/2-inch thick), Hot dogs, Spareribs, Country-style ribs. Rolled roast, Sausage.	
<b>DEF 2</b> 2. Poultry 0.1 to 6.0 lbs. (45 g to 2.7 kg)	Poultry Whole (under 4 lbs.), Cut up, Breasts (boneless) Cornish hens Whole Turkey Breast (under 6 lbs.)	
DEF 3 3. Fish 0.1 to 6.0 lbs. (45 g to 2.7 kg)	<b>Fish</b> Fillets, Whole Steaks <b>Shellfish</b> Crab meat, Lobster tails, Shrimp, Scallops	
<b>DEF 4</b> <b>4. Bread</b> 0.1 to 1.0 lb. (45 g to 454 g)	Muffins Roll, cake	
5.Set Time	<b>NOTE</b> : To defrost by time rather than weight, press <b>Defrost Weight/Time</b> five times, enter the amount of time you wish to defrost, then press <b>START/Enter</b> .	

## QUICK DEFROST

This is a quick defrost feature that allows you to choose a preset 2 minute defrost cycle at the touch of a button.

Example: To defrost for 2 minutes.			
Quick Defrost	1. Press Quick Defrost.		
NOTE: The oven will start automatically.			
	2. Halfway through the cycle, the oven will beep. Open the door, turn the meat over, Close the door, and press <b>START/Enter</b> to resume defrosting until the cycle ends.		

When the defrost time is over, four beeps will sound and **End** will display.

#### **DEFROSTING TIPS**

- When using Defrost Weight/Time, the weight to be entered is the net weight in pounds and tenths of pounds (the weight of the food minus the container).
- **Before starting,** make sure you have removed any of the metal twist-ties which often come with frozen food bags, and replace them with strings or elastic bands.
- **Open containers** such as cartons before they are placed in the oven.
- Always slit or pierce plastic pouches or packaging.
- If food is foil wrapped, remove foil and place food in a suitable container.
- Slit the skins, if any, of frozen food such as sausage.
- **Bend** plastic pouches of food to ensure even defrosting.
- Always underestimate defrosting time. If defrosted food is still icy in the center, return it to the microwave oven for more defrosting.
- **The length** of defrosting time varies according to how solidly the food is frozen.
- The shape of the package affects how quickly food will defrost. Shallow packages will defrost more quickly than a deep block.
- As food begins to defrost, separate the pieces. Separated pieces defrost more easily.
- Use small pieces of aluminum foil to shield parts of food such as chicken wings, leg tips, fish tails, or areas that start to get warm. Make sure the foil does not touch the sides, top, or bottom of the oven. The foil can damage the oven lining.
- For better results, let food stand after defrosting. (For more information on standing time, see the "Microwave Cooking Tips" section.)
- Turn food over during defrosting or standing time. Break apart and remove food as rquired.

#### **METAL RACK**

# 

To avoid risk of property damage:

Do not use the rack to pop popcorn.

The rack must be on the four plastic supports when used.

Use the rack only when cooking food on the rack position.

Do not cook with the rack on the floor of the oven.

The metal rack gives you extra space when cooking in more than one container at the same time.

#### To use the rack:

- 1. Place the rack securely in the four plastic supports.
- The rack **MUST NOT** touch the metal walls or back of the microwave oven.
- 2. Place equal amounts of food both **ABOVE AND BELOW** the rack.
- The amount of food must be approximately the same to balance out the cooking energy.