

Microwave Oven

INSTRUCTION MANUAL

**MODEL:EM831C5H
EM831C5G
EM831C5K**

Read these instructions carefully before using your microwave oven, and keep it carefully.

If you follow the instructions, your oven will provide you with many years of good service.

SAVE THESE INSTRUCTIONS CAREFULLY

PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY

- (a) Do not attempt to operate this oven with the door open since this can result in harmful exposure to microwave energy. It is important not to break or tamper with the safety interlocks.
- (b) Do not place any object between the oven front face and the door or allow soil or cleaner residue to accumulate on sealing surfaces.
- (c) Do not operate the oven if it is damaged. It is particularly important that the oven door closes properly and that there is no damage to the:
 - (1) DOOR (bent)
 - (2) HINGES AND LATCHES (broken or loosened)
 - (3) DOOR SEALS AND SEALING SURFACE
- (d) The oven should not be adjusted or repaired by anyone except properly qualified service personnel.

ADDENDUM

If the apparatus is not maintained in a good state of cleanliness, its surface could be degraded and affect the lifespan of the apparatus and lead to a dangerous situation.

Specifications

Model:	EM831C5H/5G/5K
Rated Voltage:	120V~ 60Hz
Rated Input Power(Microwave):	1200W
Rated Output Power(Microwave):	800W
Oven Capacity:	1.0 Cu.ft.
Turntable Diameter:	∅ 10.6 inch
External Dimensions:	24.0X13.6X12.0 inch (609X337X304.5mm)
Net Weight:	Approx. 31.5 Lbs(14.3 kg)

IMPORTANT SAFETY INSTRUCTIONS

WARNING

To reduce the risk of burns, electric shock, fire, injury to persons or exposure to excessive microwave oven energy when using your appliance, follow basic safety precautions, including the following:

1. Read all instructions before using the appliance.
2. Read and follow the specific: "PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY" found on page 2.
3. As with most cooking appliances, close supervision is necessary to reduce the risk of a fire in the oven cavity.
4. To reduce the risk of fire in the oven cavity:
 - i). Do not overcook food. Carefully attend the appliance when paper, plastic, or other combustible materials are placed inside the oven to facilitate cooking.
 - ii). Remove wire twist-ties and metal handles from paper or plastic containers/bags before placing them in the oven.
 - iii). If materials inside the oven ignite, keep the oven door closed. Turn the oven off, and unplug the appliance. Disconnect the power cord, shut off power at the fuse or circuit breaker panel.
 - iv). Do not use the oven cavity for storage purposes. Do not leave paper products, cooking utensils, or food in the cavity when not in use.
5. This oven must be grounded. Connect only to properly grounded outlet. See "GROUNDING INSTRUCTIONS" found on page 4.
6. Install or locate this oven only in accordance with the installation instructions provided.
7. Some products such as whole eggs and sealed containers-for example, closed glass jars-are able to explode and should not be heated in the oven.
8. Use this appliance only for its intended uses as described in this manual. Do not use corrosive chemicals or vapors in this appliance. This oven is specifically designed to heat or cook or dry food. It is not designed for industrial or laboratory use.
9. As with any appliance, close supervision is necessary when used by children.
10. Do not operate this oven if it has a damaged cord or plug, if it is not working properly or if it has been damaged or dropped.
11. This appliance should be serviced only by qualified service technicians. Contact the nearest authorized service facility for examination, repair or adjustment.
12. Do not cover or block any openings on the oven.
13. Do not store or use this appliance outdoors.
14. Do not use this oven near water, for example, near a kitchen sink, in a wet basement, near a swimming pool, or similar locations.
15. Do not immerse cord or plug in water.
16. Keep cord away from heated surfaces.
17. Do not let cord hang over edge of table or counter.
18. When cleaning surfaces of door and oven that comes together on closing the door, use only mild, nonabrasive soaps or detergents applied with a sponge or soft cloth.

19. Liquids, such as water, coffee, or tea are able to be overheated beyond the boiling point without appearing to be boiling. Visible bubbling or boiling when the container is removed from the microwave oven is not always present. THIS COULD RESULT IN VERY HOT LIQUIDS SUDDENLY BOILING OVER WHEN THE CONTAINER IS DISTURBED OR A SPOON OR OTHER UTENSIL IS INSERTED INTO THE LIQUID.
- i) Do not overheat the liquid.
 - ii) Stir the liquid both before and halfway through heating it.
 - iii) Do not use straight-sided containers with narrow necks.
 - iv) After heating, allow the container to stand in the microwave oven for a short time before removing the container.
 - v) Use extreme care when inserting a spoon or other utensil into the container.

SAVE THESE INSTRUCTIONS

GROUNDING INSTRUCTIONS

DANGER

Electric Shock Hazard

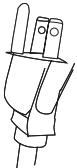
Touching some of the internal components can cause serious personal injury or death. Do not disassemble this appliance.

WARNING

Electric Shock Hazard

Improper use of the grounding can result in electric shock. Do not plug into an outlet until appliance is properly installed and grounded.

Three-pronged
(grounding) plug



This appliance must be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This appliance is equipped with a cord having grounding wire with a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded.

Consult a qualified electrician or serviceman if the grounding instructions are not completely understood or if doubt exists as to whether the appliance is properly grounded. If it is necessary to use an extension cord, use only a 3-wire extension cord that has a 3-pronged grounding plug, and a 3-slot receptacle that will accept the plug on the appliance. The marked rating of the extension cord shall be equal to or greater than the electrical rating of the appliance.

1. A short power-supply cord is provided to reduce the risks resulting from becoming entangled in or tripping over a longer cord.
2. Longer cord sets or extension cords are available and may be used if care is exercised in their use.
3. If a long cord set or extension cord is used:
 - 1) The marked electrical rating of the cord set or extension marked electrical rating of the cord set or extension cord should be at least as great as the electrical rating of the appliance.
 - 2) The extension cord must be a grounding-type 3-wire cord; and
 - 3) The longer cord should be arranged so that it will not drape over the countertop or tabletop where it can be pulled on by children or tripped over unintentionally.

Radio Interference

1. Operation of the microwave oven may cause interference to your radio, TV or similar equipment.
2. When there is interference, it may be reduced or eliminated by taking the following measures:
 - 1) Clean door and sealing surface of the oven
 - 2) Reorient the receiving antenna of radio or television.
 - 3) Relocate the microwave oven with respect to the receiver.
 - 4) Move the microwave oven away from the receiver.
 - 5) Plug the microwave oven into a different outlet so that microwave oven and receiver are on different branch circuits.

UTENSILS

CAUTION

Personal Injury Hazard

Tightly-closed utensils could explode. Closed containers should be opened and plastic pouches should be pierced before cooking.

See the instructions on "Materials you can use in microwave oven or to be avoided in microwave oven."

There may be certain non-metallic utensils that are not safe to use for microwaving. If in doubt, you can test the utensil in question following the procedure below.

Utensil Test:

1. Fill a microwave-safe container with 1 cup of cold water (250ml) along with the utensil in question.
2. Cook on maximum power for 1 minute.
3. Carefully feel the utensil. If the empty utensil is warm, do not use it for microwave cooking.
4. Do not exceed 1 minute cooking time.

Materials you can use in microwave oven

Utensils	Remarks
Aluminum foil	Shielding only. Small smooth pieces can be used to cover thin parts of meat or poultry to prevent overcooking. Arcing can occur if foil is too close to oven walls. The foil should be at least 1 inch (2.5cm) away from oven walls.
Browning dish	Follow manufacturer's instructions. The bottom of browning dish must be at least 3/16 inch (5mm) above the turntable. Incorrect usage may cause the turntable to break.
Dinnerware	Microwave-safe only. Follow manufacturer's instructions. Do not use cracked or chipped dishes.
Glass jars	Always remove lid. Use only to heat food until just warm. Most glass jars are not heat resistant and may break.
Glassware	Heat-resistant oven glassware only. Make sure there is no metallic trim. Do not use cracked or chipped dishes.
Oven cooking bags	Follow manufacturer's instructions. Do not close with metal tie. Make slits to allow steam to escape.
Paper plates and cups	Use for short-term cooking/warming only. Do not leave oven unattended while cooking.
Paper towels	Use to cover food for reheating and absorbing fat. Use with supervision for a short-term cooking only.
Parchment paper	Use as a cover to prevent splattering or a wrap for steaming.
Plastic	Microwave-safe only. Follow the manufacturer's instructions. Should be labeled "Microwave Safe". Some plastic containers soften, as the food inside gets hot. "Boiling bags" and tightly closed plastic bags should be slit, pierced or vented as directed by package.
Plastic wrap	Microwave-safe only. Use to cover food during cooking to retain moisture. Do not allow plastic wrap to touch food.
Thermometers	Microwave-safe only (meat and candy thermometers).
Wax paper	Use as a cover to prevent splattering and retain moisture.

Materials to be avoided in microwave oven

Utensils	Remarks
Aluminum tray	May cause arcing. Transfer food into microwave-safe dish.
Food carton with metal handle	May cause arcing. Transfer food into microwave-safe dish.
Metal or metal-trimmed utensils	Metal shields the food from microwave energy. Metal trim may cause arcing.
Metal twist ties	May cause arcing and could cause a fire in the oven.
Paper bags	May cause a fire in the oven.
Plastic foam	Plastic foam may melt or contaminate the liquid inside when exposed to high temperature.
Wood	Wood will dry out when used in the microwave oven and may split or crack.

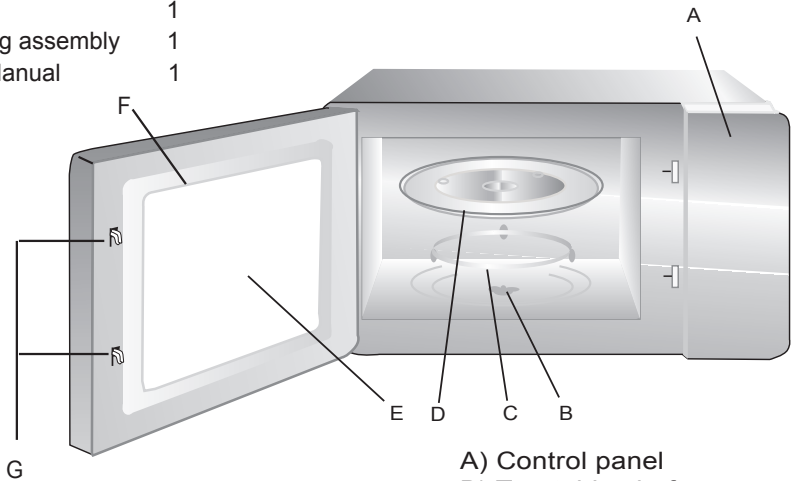
SETTING UP YOUR OVEN

Names of Oven Parts and Accessories

Remove the oven and all materials from the carton and oven cavity.

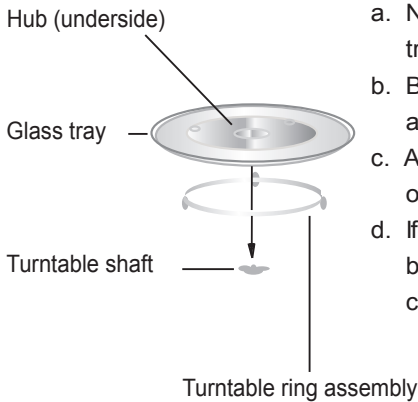
Your oven comes with the following accessories:

Glass tray	1
Turntable ring assembly	1
Instruction Manual	1



- A) Control panel
- B) Turntable shaft
- C) Turntable ring assembly
- D) Glass tray
- E) Observation window
- F) Door assembly
- G) Safety interlock system

Turntable Installation



- a. Never place the glass tray upside down. The glass tray should never be restricted.
- b. Both glass tray and turntable ring assembly must always be used during cooking.
- c. All food and containers of food are always placed on the glass tray for cooking.
- d. If glass tray or turntable ring assembly cracks or breaks, contact your nearest authorized service center.

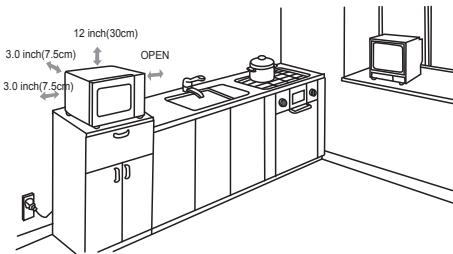
Countertop Installation

Remove all packing material and accessories. Examine the oven for any damage such as dents or broken door. Do not install if oven is damaged.

Cabinet: Remove any protective film found on the microwave oven cabinet surface. Do not remove the light brown Mica cover that is attached to the oven cavity to protect the magnetron.

Installation

1. Select a level surface that provide enough open space for the intake and/or outlet vents.



A minimum clearance of 3.0 inches (7.5cm) is required between the oven and any adjacent walls. One side must be open.

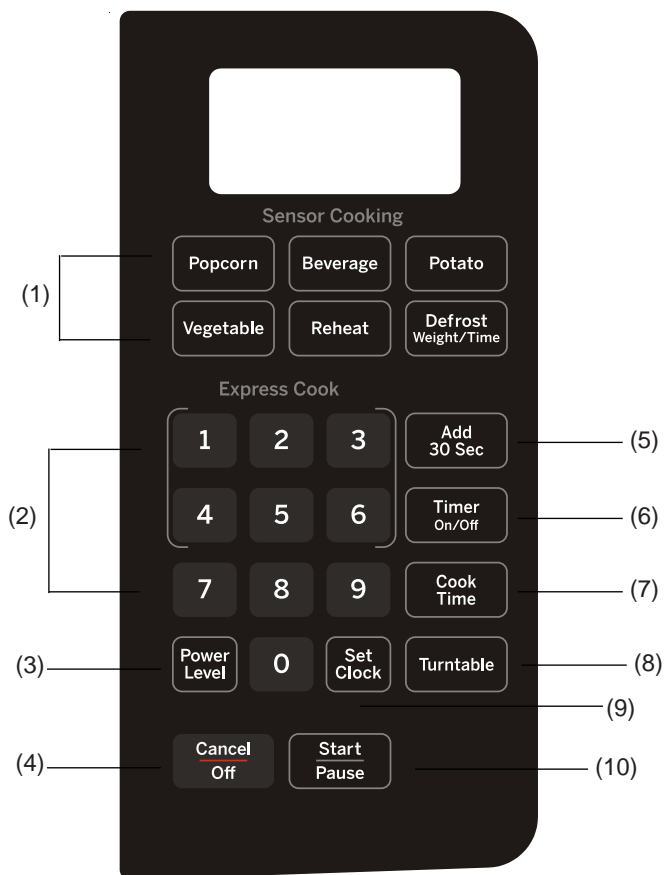
- (1) Leave a minimum clearance of 12 inches (30cm) above the oven.
- (2) Do not remove the legs from the bottom of the oven.

- (3) Blocking the intake and/or outlet openings can damage the oven.
 - (4) Place the oven as far away from radios and TV as possible. Operation of microwave oven may cause interference to your radio or TV reception.
2. Plug your oven into a standard household outlet. Be sure the voltage and the frequency is the same as the voltage and the frequency on the rating label.

WARNING: Do not install oven over a range cooktop or other heat-producing appliance. If installed near or over a heat source, the oven could be damaged and the warranty would be void.

OPERATION

Control Panel and Features



- (1) Sensor Cooking:Popcorn,Beverage,Potato,Vegetable,Reheat, Defrost Weight/Time
- (2) Number buttons from 0 to 9.
- (3) Power Level
- (4) Cancel/Off
- (5) Add 30 Sec
- (6) Timer On/Off
- (7) Cook Time
- (8) Turntable
- (9) Set Clock
- (10) Start/Pause

OPERATION

Cook Time

Allows you to microwave for any time up to 99 minutes and 99 seconds.

Power level 10 (HIGH) is automatically set, but you may change it for more flexibility.

- 1 Press Cook Time
- 2 Enter cooking time.
- 3 Press START.
Cooking will start when the countdown begins in the display.

You may open the door during Cook Time to check the food. Close the door and press START to resume cooking.

Express Cook

This is a quick way to set cooking time for 1-6 minutes.

- 1 Press one of the Express Cook pads (from 1-6) for 1-6 minutes of cooking at power level 10.
For example, press the 2 pad for 2 minutes of cooking time.

The power level can be changed as time is counting down. Press POWER LEVEL and enter 1-10.

NOTE: Express Cook function pertains to pads 1-6 only.

Add 30 Sec

This will add 30 seconds to the time counting down each time the pad is pressed. Each touch will add 30 seconds, up to 99 minutes and 99 seconds.

Add 30 sec can also be used like an express 30 seconds button. The microwave oven will start immediately when pressed.

Weight Defrost

Use Weight Defrost for meat, poultry and fish. Use Time Defrost for most other frozen foods. (Time Defrost is explained on page 13.)

- 1 Press DEFROST once for Weight Defrost
- 2 Enter the weight in pounds.
- 3 Press START.
Cooking will start when the countdown begins in the display.

Defrosting Tips

Remove meat from package and place on microwave-safe dish.

When the oven signals, turn the food over. Remove defrosted meat or shield warm areas with small pieces of foil.

After defrosting, most meats need to stand 5 minutes to complete defrosting. Large roasts should stand for about 30 minutes.

Conversion Guide

If the weight of food is stated in pounds and ounces, the ounces must be converted to tenths (.1) of a pound.

Ounces	Pounds
1-2	.1
3	.2
4-5	.3
6-7	.4
8	.5
9-10	.6
11	.7
12-13	.8
14-15	.9

Note: Max 6.0 lbs.

Time Defrost

Allows you to defrost for a selected length of time.

- 1** Press DEFROST twice for Time Defrost
- 2** Enter defrosting time in minutes and seconds.
- 3** Press START.
Cooking will start when the countdown begins in the display.

At one half of selected defrosting time, turn food over and break apart or rearrange pieces for more even defrosting. Shield any warm areas with small pieces of foil. The oven will continue to defrost if you don't open the door and turn the food.

Noises may be heard during defrosting. This is normal when oven is not operating at High power.

Defrosting Tips

Foods frozen in paper or plastic can be defrosted in the package. Closed packages should be slit, pierced or vented AFTER food has partially defrosted. Plastic storage containers should be partially uncovered.

Family-size, prepackaged frozen dinners can be defrosted and microwaved. If the food is in a foil container, transfer it to a microwave-safe dish.

Foods that spoil easily should not be allowed to sit out for more than one hour after defrosting. Room temperature promotes the growth of harmful bacteria.

For more even defrosting of larger foods, such as roasts, use Time Defrost. Be sure large meats are completely defrosted before cooking.

When defrosted, food should be cool but softened in all areas. If still slightly icy, return to the microwave very briefly, or let it stand a few minutes.

Turntable

For best cooking results, leave the turntable on. It can be turned off for large dishes.

Press the Turntable pad once to turn the turntable off. Press again to turn the turntable back on.

Sometimes the turntable can become too hot to touch. Be careful touching the turntable during and after cooking.

Turntable can be turned off during the Cook Time or Express Cook features by pressing the Turntable pad. Note: At the conclusion of the Cook Time and Express Cook features, the turntable will automatically return to ON.

Vent Fan

The vent fan removes steam and other vapors from surface cooking.

Press Vent Fan once for high fan speed, twice for low fan speed or three times to turn the fan off.

Automatic Fan

An automatic fan feature protects the microwave from too much heat rising from the cooktop below it. It automatically turns on if it senses too much heat.

If you have turned the fan on you may find that you cannot turn it off. The fan will automatically turn off when the internal parts are cool. It may stay on for 30 minutes or more after the cooktop and microwave controls are turned off.

Popcorn

To use the Popcorn feature:

1 Press the POPCORN button once for 2.0 ounce bag, twice for 2.5 ounce bag, or three times for a 3.0 ounce bag.

2 Press START.

Cooking will start when the countdown begins in the display.

You can not change the selection or quantity after the feature has started.

If food is undercooked after the countdown, use Cook Time for additional cooking time. We recommend 30 seconds and watch carefully.

Use only with prepackaged microwave popcorn weighing 2.0 to 3.0 ounces.

NOTE: Do not use this feature twice in succession on the same food portion—it may result in severely overcooked or burnt food.

Reheat

The Reheat feature reheats servings of previously cooked foods or a plate of leftovers.

Place the cup of liquid or covered food in the oven.

Press the REHEAT button up to six times to choose the correct selection.

Press once for a pizza.

Press twice for vegetables.

Press three times for a plate of leftovers.

Press four times for soup.

Press five times for meat.

Press six times for pasta.

Press the reheat pad again after food type has been entered in order to select quantity.

Press START.

Cooking will start when the countdown begins in the display.

After removing food from the oven, stir, if possible, to even out the temperature. Reheated foods may have wide variations in temperature. Some areas of food may be extremely hot.

If food is not hot enough after the countdown use Cook Time for additional reheating time.

Some Foods Not Recommended for Use With Reheat

It is best to use Cook Time for these foods:

Bread products.

Foods that must be reheated uncovered.

Foods that need to be stirred or rotated.

Foods calling for a dry look or crisp surface after reheating.

NOTE: Do not use this feature twice in succession on the same food portion—it may result in severely overcooked or burnt food.

Beverage

Beverage

Use the Beverage feature to heat various amounts of liquids measured in ounces: Place the liquid into the microwave oven.

4 oz.	1/2 cup
8 oz.	1 cup
12 oz.	1-1/2 cups
16 oz.	2 cups

- 1 Press the Beverage button up to four times to choose the correct selection.
Press once for a 4 ounce beverage.
Press twice for a 8 ounce beverage.
Press three times for a 12 ounce beverage.
Press four times for a 16 ounce beverage.
- 2 Press START.
Cooking will start when the countdown begins in the display.

Potato

Potato

To use the Potato feature:
Place the potato(es) into the oven.

- 1 Press the Potato button up to four times to choose the correct selection.
Press once for 1 item.
Press twice for 2 items.
Press three times for 3 items.
Press four times for 4 items.
- 2 Press START.
Cooking will start when the countdown begins in the display.

NOTE: Do not use this feature twice in succession on the same food portion. It may result in severely overcooked or burnt food.

Changing the Power Level

The power level may be entered or changed before or during cooking. Power Level is set for Level 10 (High) unless it is changed.

- 1** Press Power Level button.
- 2** Enter new power level by using the number pads or press the Power Level button multiple times until you find the level you want.
- 3** After you have selected the power level, wait five seconds. The display will go back to the Cook Timescreen.
- 4** Enter cooking time and press START.

OR

- 1** Press Cook Time button.
- 2** Enter your cooking time.
- 3** Press Power Level button.
- 4** Enter new power level by using the number pads or press the Power Level button multiple times until you find the level you want.
- 5** After you have selected the power level, wait five seconds. The display will go back to the Cook Time (Enter Time) screen.
- 6** Press START.

Variable power levels add flexibility to microwave cooking. The power levels on the microwave oven can be compared to the surface units on a range. Each power level gives you microwave energy a certain percent of the time. Power level 7 is microwave energy 70% of the time. Power level 3 is energy 30% of the time. Most cooking will be done on High (power level 10) which gives you 100% power. Power level 10 will cook faster but food may need more frequent stirring, rotating or turning over. A lower setting will cook more evenly and need less stirring or rotating of the food. Some foods may have better flavor, texture or appearance if one of the lower settings is used. Use a lower power level when cooking foods that have a tendency to boil over, such as scalloped potatoes and some casseroles.

Rest periods (when the microwave energy cycles off) give time for the food to “equalize” or transfer heat to the inside of the food. An example of this is shown with Power level 3—the defrost cycle. If microwave energy did not cycle off, the outside of the food would cook before the inside was defrosted.

Here are some examples of uses for various power levels:

High 10 (100%): Fish, bacon, vegetables, boiling liquids.

Med-High 7 (70%): Gentle cooking of meat and poultry; baking casseroles and reheating.

Medium 5 (50%): Slow cooking and tenderizing for stews and less tender cuts of meat.

Low 2 or 3 (20 or 30%): Defrosting; simmering; delicate sauces.

Warm 1 (10%): Keeping food warm; softening butter.

NOTE: You can also change the power level during many cooking modes by pressing the power level button entering a valid power level.

Clock

To change the time of day.

- 1** Press the SetClock button. (The microwave should not be running.)
- 2** Enter the appropriate time of day. Clock is on a 12-hour scale.
- 3** PressSetClockor Start to accept the time.

Start/Pause

In addition to starting many functions, START/PAUSE allows you to stop cooking without opening the door or clearing the display and resume cooking later.

Cancel/Off

Press the CANCEL/OFF button to stop and cancel cooking at any time.

Control Lock-Out

You may lock the control panel to prevent the oven from being accidentally started during cleaning or being used by children.

To lock or unlock the controls, press and hold the CANCEL/OFF button for three seconds. When the control panel is locked, LOCKED will be displayed briefly anytime a button or dial is pressed. "L" will show in the display.

Surface Light

Press SURFACE LIGHT once for bright light, twice for the night light or a third time to turn the light off.

Timer

NOTE:TheTimer indicator will be lit while the timer is operating.

Timer

TheTimer operates as a minute timer and can be used at any time, even when the oven is operating.

- 1** Press theTimer button.
- 2** Enter a time.
- 3** Press theTimer 3 Start button to start.

To cancel, press theTimer button. or Clear button.

NOTE:If you press the Clear button to cancel the timer and you are cooking at the same time, it will cancel your cooking selection also.

When time is up, the oven will signal.

To turn off the timer signal, pressTimeror Cancel

Display

If you have the Timer counting down and you are using the Cook Time at the same time, you can change the display to show either the timer or the cook time countdown.

If the display shows the time for the Timer and you would like to view the Cook Time, press the COOK TIME button.

If the display shows the time for the Cook Time and you would like to view the Timer, press the TIMERbutton

Maintenance

Troubleshooting

Check your problem by using the chart below and try the solutions for each problem. If the microwave oven still does not work properly, contact the nearest authorized service center.

TROUBLE	POSSIBLE CAUSE	POSSIBLE REMEDY
Oven will not start	<ul style="list-style-type: none">a. Electrical cord for oven is not plugged in.b. Door is open.c. Wrong operation is set.	<ul style="list-style-type: none">a. Plug into the outlet.b. Close the door and try again.c. Check instructions.
Arcing or sparking	<ul style="list-style-type: none">a. Materials to be avoided in microwave oven were used.b. The oven is operated when empty.c. Spilled food remains in the cavity.	<ul style="list-style-type: none">a. Use microwave-safe cookware only.b. Do not operate with oven empty.c. Clean cavity with wet towel.
Unevenly cooked foods	<ul style="list-style-type: none">a. Materials to be avoided in microwave oven were used.b. Food is not defrosted completely.c. Cooking time, power level is not suitable.d. Food is not turned or stirred.	<ul style="list-style-type: none">a. Use microwave-safe cookware only.b. Completely defrost food.c. Use correct cooking time, power level.d. Turn or stir food.
Overcooked foods	Cooking time, power level is not suitable.	Use correct cooking time, power level.
Undercooked foods	<ul style="list-style-type: none">a. Materials to be avoided in microwave oven were used.b. Food is not defrosted completely.c. Oven ventilation ports are restricted.d. Cooking time, power level is not suitable.	<ul style="list-style-type: none">a. Use microwave-safe cookware only.b. Completely defrost food.c. Check to see that oven ventilation ports are not restricted.d. Use correct cooking time, power level.
Improper defrosting	<ul style="list-style-type: none">a. Materials to be avoided in microwave oven were used.b. Cooking time, power level is not suitable.c. Food is not turned or stirred.	<ul style="list-style-type: none">a. Use microwave-safe cookware only.b. Use correct cooking time, power level.c. Turn or stir food.