

# OWNER'S MANUAL LIGHTWAVE CONVECTION

Please read this owner's manual thoroughly before operating.

MJ3281BS



# CONTENTS

## How the Microwave Function Works

Microwaves are a form of energy similar to radio, television waves, and ordinary daylight. Normally, microwaves spread outwards as they travel through the atmosphere and disappear without effect. This oven, however, has a magnetron that is designed to make use of the energy in microwaves. Electricity, supplied to the magnetron tube, is used to create microwave energy.

These microwaves enter the cooking area through openings inside the oven. A tray is located inside the oven. Microwaves cannot pass through metal walls of the oven, but they can penetrate such materials as glass, porcelain and paper, the materials out of which microwave-safe cooking dishes are constructed.

Microwaves do not heat cookware, though cooking vessels will eventually get hot from the heat generated by the food.

## A very safe appliance

**Your Microwave oven, is one of the safest of all home appliances. When the door is opened, the oven automatically stops producing microwaves. Microwave energy is converted completely to heat when it enters food, leaving no "left over" energy to harm you when you eat your food.**



### NOTE

When the oven is not used, it is recommended to unplug it from the electrical socket.

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# IMPORTANT SAFETY INSTRUCTIONS

Please keep for future reference. Read and follow all instructions before using your oven to prevent the risk of fire, electric shock, personal injury, or damage when using the oven. This guide does not cover all possible conditions that may occur. Always contact your service agent or manufacturer about problems that you do not understand.

## **WARNING**

This is the safety alert symbol. This symbol alerts you to potential hazards that can kill or hurt you and others. All safety messages will follow the safety alert symbol with either the word "WARNING" or "CAUTION". These word means:

### **WARNING**

This symbol will alert you to hazards or unsafe practices which could cause serious bodily harm or death.

### **CAUTION**

This symbol will alert you to hazards or unsafe practices which could cause bodily injury or property damage.

## **WARNING**

- 1 Do not attempt to tamper with, or make any adjustments or repairs to the door, door seals, control panel, safety interlock switches or any other part of the oven which would involve the removal of any cover protecting against exposure to microwave energy. Do not operate the oven if the door seals and adjacent parts of the microwave oven are faulty. Repairs should only be undertaken by a qualified service technician.**
  - Unlike other appliances, the microwave oven is a high-voltage and a high electrical-current piece of equipment. Improper use or repair could result in harmful exposure to excessive microwave energy or an electrical shock.
- 2 Do not use the oven for the purpose of dehumidification. (For example: Operating the microwave oven with wet newspapers, clothes, toys, electric devices, pet or child etc.)**
  - It can cause serious damage to safety which can result in a fire, burn or sudden death due to an electrical shock.
- 3 The appliance is not intended for use by young children or elderly persons. Only allow children to use the oven without supervision when adequate instructions have been given so that the child is able to use the oven in a safe way and understands the hazards of improper use.**
  - Improper use may cause damage such as a fire, electric shock or burn.
- 4 Accessible parts may become hot during use. Young children should be kept away.**
  - They may get burnt.
- 5 Liquids or other foods must not be heated in sealed containers since they are likely to explode. Remove the plastic wrapping from food before cooking or defrosting. Note that in some cases food should be covered with plastic film, for heating or cooking.**
  - They could burst.
- 6 Be certain to use proper accessories on each operation mode, refer to guide page 9.**
  - Improper use could result in damage to your oven and accessories, or could make spark and a fire.
- 7 Children should not be allowed to play with accessories or hang down from the door handle.**
  - They may get hurt.

- 8 It is hazardous for anyone other than a competent person to carry out any service or repair operation that involves the removal of a cover which gives protection against exposure to microwave energy.
- 9 When the appliance is operated in the combination mode, children should only use the oven under adult supervision due to the high temperatures generated.

## CAUTION

- 1 You cannot operate your oven with the door open due to the safety interlocks built into the door mechanism. It is important not to tamper with the safety interlocks.
  - It could result in harmful exposure to excessive microwave energy. (Safety interlocks automatically switch off any cooking activity when the door is opened.)
- 2 Do not place any object (such as kitchen towels, napkins, etc.) between the oven front face and the door or allow food or cleaner residue to accumulate on sealing surfaces.
  - It could result in harmful exposure to excessive microwave energy.
- 3 Do not operate your 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 loose), (3) door seals and sealing surfaces.
  - It could result in harmful exposure to excessive microwave energy.
- 4 Please ensure cooking times are correctly set, small amounts of food require shorter cooking or heating time.
  - Over cooking may result in the food catching on fire and subsequent damage to your oven.
- 5 When heating liquids, e.g. soups, sauces and beverages in your microwave oven,
  - \* Avoid using straight sided containers with narrow necks.
  - \* Do not overheat.
  - \* Stir the liquid before placing the container in the oven and again halfway through the heating time.
  - \* After heating, let it stand in the oven for a short time; stir or shake it again carefully and check the temperature of it before consuming to avoid burns (especially, contents of feeding bottles and baby food jars).
  - Be careful when handling the container. Microwave heating of beverages can result in delayed eruptive boiling without evidence of bubbling. This could result in hot liquids suddenly boiling over.
- 6 An exhaust outlet is located on the top, bottom or side of the oven. Don't block the outlet.
  - It could result in damage to your oven and poor cooking results.
- 7 Do not operate the oven when empty. It is best to leave a glass of water in the oven when not in use. The water will safely absorb all microwave energy, if the oven is accidentally started.
  - Improper use could result in damage to your oven.
- 8 Do not cook food wrapped in paper towels, unless your cook book contains instructions for the food you are cooking. And do not use newspaper in place of paper towels for cooking.
  - Improper use can cause an explosion or a fire.

- 9 Do not use wooden containers and ceramic containers that have metallic (e.g. gold or silver) inlays. Always remove metal twist ties. Check that the utensils are suitable for use in microwave ovens before use.**
- They may heat-up and char. Metal objects in particular may arc in the oven, which can cause serious damage.
- 10 Do not use recycled paper products.**
- They may contain impurities which may cause sparks and/or fires when used in cooking.
- 11 Do not rinse the tray and rack by placing it in water just after cooking. This may cause breakage or damage.**
- Improper use could result in damage to your oven.
- 12 Be certain to place the oven so the front of the door is 8 cm or more behind the edge of the surface on which it is placed, to avoid accidental tipping of the appliance.**
- Improper use could result in bodily injury and oven damage.
- 13 Before cooking, pierce the skin of potatoes, apples or any such fruit or vegetables.**
- They could burst.
- 14 Do not cook eggs in their shell. Eggs in their shell and whole hardboiled eggs should not be heated in microwave ovens since they may explode, even after microwave heating has ended.**
- Pressure will build up inside the egg which will burst.
- 15 Do not attempt deep fat frying in your oven.**
- This could result in a sudden boil over of the hot liquid.
- 16 If smoke is observed, switch off or disconnect the oven from the power supply and keep the oven door closed in order to stifle any flames.**
- It can cause serious damage such as a fire or electric shock.
- 17 When food is heated or cooked in disposable containers made of plastic, paper or other combustible materials, keep an eye on the oven and check it frequently.**
- Your food may pour due to the possibility of container deterioration, which can also cause a fire.
- 18 The temperature of accessible surfaces may be high when the appliance is operating. Do not touch the oven door, outer cabinet, rear cabinet, oven cavity, accessories and dishes during grill mode, convection mode and auto cook operations, before clearing make sure they are not hot.**
- As they become hot, there is danger of getting burnt unless wearing thick culinary gloves.
- 19 The oven should be cleaned regularly and any food deposits should be removed.**
- Failure to maintain the oven in a clean condition could lead to deterioration of the surface. This could adversely affect the life of the appliance and possibly result in a hazardous situation.
- 20 If there are heating elements, the appliance becomes hot during use. Care should be taken to avoid touching the heating elements inside the oven.**
- There is danger of getting burnt.

- 21** Follow exact directions given by each manufacturer for their popcorn product. Do not leave the oven unattended while the corn is being popped. If corn fails to pop after the suggested times, discontinue cooking. Never use a brown paper bag for popping corn. Never attempt to pop leftover kernels.
- Overcooking could result in the corn catching fire.
- 22** This appliance must be earthed.
- If the supply cord is damaged, it must be replaced by the manufacturer, a service agent or a similarly qualified person in order to avoid potential hazards.
- Improper use may cause serious electrical damage.
- 23** Do not use harsh abrasive cleaners or sharp metal scrapers to clean the oven door glass.
- They can scratch the surface, which may result in the glass shattering.
- 24** This oven should not be used for commercial catering purposes.
- Improper use could result in damage to your oven.
- 25** The microwave oven must be operated with the decorative door open.
- If the door is closed while operating, the airflow will get worse possibly resulting in a fire or damage to your oven and the cabinet.
- 26** The connection may be achieved by having the plug accessible or by incorporating a switch in the fixed wiring in accordance with the wiring rules.
- Using an improper plug or switch can cause an electric shock or fire.
- 27** The microwave oven should be used freestanding.
- 28** This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- 29** Children should be supervised to ensure that they do not play with the appliance.

## BEFORE USE

### Unpacking & Installing

By following the basic steps on these two pages you will be able to quickly check that your oven is operating correctly. Please pay particular attention to the guidelines on where to install your oven. When unpacking your oven make sure you remove all accessories and packing materials. Check to make sure that your oven has not been damaged during shipping.

- 1 Unpack your oven and place it on a flat level surface.



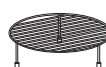
Glass tray



Rotating ring



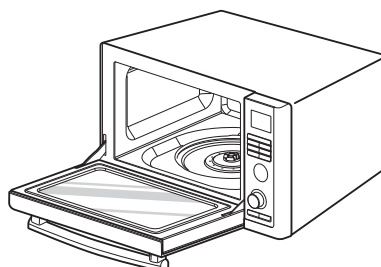
High rack



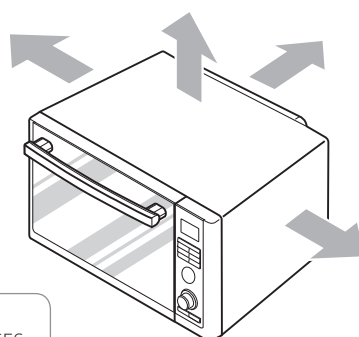
Low rack



Metal tray



- 2 Place the oven on the level location of your choice with more than 85 cm height but make sure there is at least 20 cm of space on the top and 10 cm at the rear for proper ventilation. The front of the oven should be at least 8 cm from the edge of the surface to prevent tipping.  
An exhaust outlet is located on bottom or side of the oven. Blocking the outlet can damage the oven.



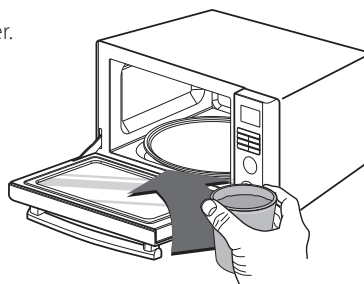
#### CAUTION

- THIS OVEN SHOULD NOT BE USED FOR COMMERCIAL CATERING PURPOSES.

- 3 Plug your oven into a standard household socket. Make sure your oven is the only appliance connected to the socket.  
**If your oven does not operate properly, unplug it from the electrical socket and then plug it back in.**

- 4 Open your oven door by pulling the door handle. Place the rotating ring inside the oven and place the glass tray on top.

- 5 Fill a **microwaveable-safe container** with 300 ml (1/2 pint) of water. Place on the glass tray and close the oven door.  
If you have any doubts about what type of container to use please refer to Page 10.





6 Press the **STOP/CLEAR** button, and press the **START/QUICK START** button once to set 30 second of cooking time.







7 The **DISPLAY** will count down from 30 second.  
When it reaches 0 it will sound BEEPS. Open the oven door and test the temperature of the water.  
If your oven is operating the water should be warm.  
**Be careful when removing the container it may be hot.**



**YOUR OVEN IS NOW INSTALLED**

8 The contents of feeding bottles and baby food jars shall be stirred or shaken and the temperature checked before consumption in order to avoid burns.

**Method To Use Accessories As Per Mode**

	Microwave	Grill	Convection	Grill combi	Conv combi
 High rack	—	○	○	○	○
 Low rack	—	○	○	○	○
 Glass tray	○	○	○	○	○
 Metal tray	—	○	○	—	—

Caution: Use accessories in accordance with cooking guides!

○ Acceptable  
— Not Acceptable

## Microwaveable-Safe Utensils

### Never use metal or metal trimmed utensils when using microwave function

Microwaves cannot penetrate metal. They will bounce off any metal object in the oven and cause arcing, an alarming phenomenon that resembles lightning. Most heat resistant non metallic cooking utensils are safe for use in your oven. However, some may contain materials that render them unsuitable as microwave cookware. If you have any doubts about a particular utensil, there's a simple way to find out if it can be used in the microwave.

Place the utensil in question next to a glass bowl filled with water when using microwave function. Microwave at power HIGH for 1 minute. If the water heats up but the utensil remains cool to the touch, the utensil is microwave-safe. However, if the water does not change temperature but the utensil becomes warm, microwaves are being absorbed by the utensil and it is not safe for use when using microwave function. You probably have many items on hand in your kitchen right now that can be used as cooking equipment in the microwave. Just read through the following checklist.

### Dinner plates

Many kinds of dinnerware are microwave-safe. If in doubt consult the manufacturer's literature or perform the microwave test.

### Glassware

Glassware that is heat-resistant is microwave-safe. This would include all brands of oven tempered glass cookware. However, do not use delicate glassware, such as tumblers or wine glasses, as these might shatter as the food warms.

### Plastic storage containers

These can be used to hold foods that are to be quickly reheated. However, they should not be used to hold foods that will need considerable time in the oven as hot foods will eventually warp or melt plastic containers.

### Paper

Paper plates and containers are convenient and safe to use when using microwave function, provided that the cooking time is short and foods to be cooked are low in fat and moisture. Paper towels are also very useful for wrapping foods and for lining baking trays in which greasy foods such as bacon are cooked. In general, avoid coloured paper products as the colour may run. Some recycled paper products may contain impurities which could cause arcing or fires when used in the microwave.

### Plastic cooking bags

Provided they are made specially for cooking, cooking bags are microwave safe. However, be sure to make a slit in the bag so that steam can escape. Never use ordinary plastic bags for cooking in using microwave function, as they will melt and rupture.

### Plastic microwave cookware

A variety of shapes and sizes of microwave cookware are available. For the most part, you can probably use items you already have on hand rather than investing in new kitchen equipment.

### Pottery, stoneware and ceramic

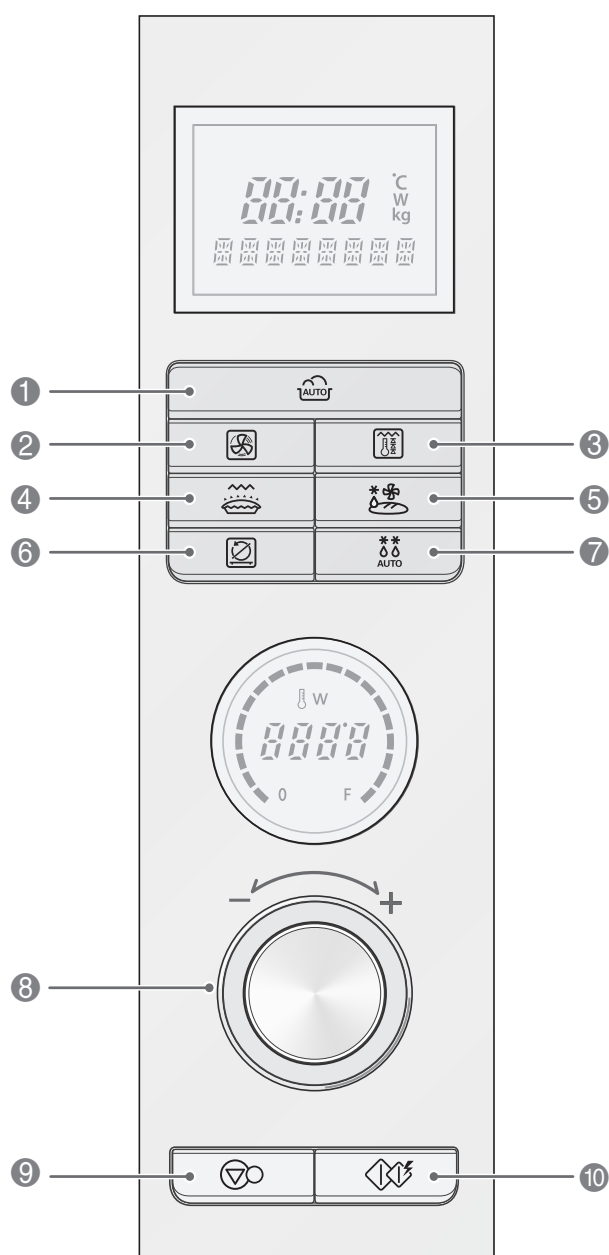
Containers made of these materials are usually fine for use when using microwave function, but they should be tested to be sure.



### CAUTION

- Some items with high lead or iron content are not suitable as cooking utensils.
- Utensils should be checked to ensure that they are suitable for use in the microwave.

## Control Panel



### Part

#### 1 CHEF RECIPE

Chef Recipe allows you to cook most of your favourite food by selecting the food type and the weight of the food. See page 17 "Chef recipe"

#### 2 ACTIVE CONVECTION

See page 20 "Active convection"

#### 3 GRILL TEMP CONTROL

See page 22 "Grill temp control"

#### 4 CRISPY REHEAT

See page 24 "Crispy reheat"

#### 5 DEFROST & BAKE

See page 25 "Defrost & bake"

#### 6 TURN TABLE ON/OFF

You can select turn table on or off.

#### 7 AUTO DEFROST

See page 26 "Auto defrost"

#### 8 COOK MODE

- Determine the selected cooking category.
- Set cooking times, temperature and power level.
- While cooking with auto and manual function, you can increase or decrease the cooking time at any point by turning the dial (except defrost mode).

#### 9 STOP/CLEAR

- Stop over and clear all entries except time of day.

#### 10 START/QUICK START

- In order to start cooking what has been selected, press button once.
- The quick start feature allows you to set 30 second intervals of HIGH power cooking with a touch of the quick start button.

## Setting The Clock

You can set either 12 hour clock or 24 hour clock. The following example will show you how to set the time for 14:35 when using the 24 clock.

- 1 Plug your oven for the first time.

"24H" appears on the display.

Press **START/QUICK START** for 24 clock confirmation.

(If you want to change a different option after setting clock, you have to unplug and plug it back in.)



- 2 Turn **COOK MODE** until display shows "14:00".

Press **START/QUICK START** for confirmation.



- 3 Turn **COOK MODE** until display shows "14:35".

Press **START/QUICK START**.

The clock starts counting.



### NOTE

- When your oven is plugged in for the first time you will have to reset the clock.
- If the clock (or display) shows any strange looking symbols, unplug your oven from the electrical socket and plug it back in and reset the clock.

## Turn Table On/Off

For best cooking results, leave the turn table be on.

It can be turned off for large dishes. Press "☐" to turn the turn table on or off.

### NOTE

- Sometimes the turn table can become hot to touch. Be careful touching the turn table during and after cooking.
- Do not run an empty microwave.

## Child Lock

The following example will show you how to set the child lock.

- 1 Press **STOP/CLEAR**.



- 2 Press and hold **STOP/CLEAR** until "**CHILD LOCKED**" and "🔒" appears on the display and BEEP sounds.

The **CHILD LOCK** is now set.

If any button is pressed, "**CHILD LOCKED**" and "🔒" will appear on the display.



- 3 To cancel **CHILD LOCK** press and hold **STOP/CLEAR** until "**CHILD LOCKED**" disappears.

You will hear BEEP when it's unlocked.



### NOTE

Your oven has a safety feature that prevents accidental running of the oven. Once the child lock is set, you will be unable to use any functions and no cooking can take place.

## Quick Start

The following example will show you how to set 2 minutes of cooking on high power (900W).

- 1 Press **STOP/CLEAR**.



- 2 Press **START/QUICK START** four times to select 2 minutes on high power (900 W).

Your oven will start before you have finished the fourth press.



- 3 During **START/QUICK START** cooking, you can extend the cooking time up to 99 minutes 59 second by turning the **COOK MODE** dial.



### NOTE

The **START/QUICK START** feature allows you to set 30 second intervals of HIGH power (900W) cooking by pressing the **START/QUICK START** button.

# HOW TO USE

## Microwave Power Cooking

The following example will show you how to cook some food on 720W power for 5 minutes.

- 1 Press **STOP/CLEAR**.



- 2 Turn **COOK MODE** to select **Microwave**.  
The following indication is displayed: "≈".  
Press **START/QUICK START** for mode confirmation.



- 3 Turn **COOK MODE** until display shows "720 W".  
Press **START/QUICK START** for power confirmation.



- 4 Turn **COOK MODE** until display shows "5:00".  
Press **START/QUICK START**.



### NOTE

- Your oven has 5 microwave power settings. High power is automatically selected and turning off **COOK MODE** will select a different power level.
- Food to be cooked should be placed in a microwaveable-safe utensils.
- Please do not use the following accessory.



High rack



Low rack

## Microwave Power Level

This oven is equipped with 5 power levels to give you maximum flexibility and control over cooking.

The table below shows some examples of food and their recommended cooking power levels for use with this oven.

POWER LEVEL	OUTPUT	USE	ACCESSORY
HIGH	900 W	<ul style="list-style-type: none"> <li>• Boil water</li> <li>• Brown minced beef</li> <li>• Cook poultry pieces, fish, vegetables</li> <li>• Cook tender cuts of meat</li> </ul>	Microwaveable-safe plate
MED-HIGH	720 W	<ul style="list-style-type: none"> <li>• All reheating</li> <li>• Roast meat and poultry</li> <li>• Cook mushrooms and shellfish</li> <li>• Cook foods containing cheese and eggs</li> </ul>	
MED	540 W	<ul style="list-style-type: none"> <li>• Bake cakes and scones</li> <li>• Prepare eggs</li> <li>• Cook custard</li> <li>• Prepare rice, soup</li> </ul>	
MED-LOW	360 W	<ul style="list-style-type: none"> <li>• All thawing</li> <li>• Melt butter and chocolate</li> <li>• Cook less tender cuts of meat</li> </ul>	
LOW	180 W	<ul style="list-style-type: none"> <li>• Soften butter &amp; cheese</li> <li>• Soften ice cream</li> <li>• Raise yeast-based dough</li> </ul>	

## Grill Cooking

The following example shows you how to use the grill to cook food for 12 minutes.

- 1 Press **STOP/CLEAR**.



- 2 Turn **COOK MODE** to select **Grill**.

The following indication is displayed: "🔥🔥".

Press **START/QUICK START** for grill confirmation.



- 3 Turn **COOK MODE** until display shows "12:00".



- 4 Press **START/QUICK START**.



### ! CAUTION

Always use gloves when removing food and accessories after cooking as the oven & accessories will be very hot.

### ! NOTE

- This feature will allow you to brown and get food crisper more quickly.
- For the best result, use the following accessory.



High rack

## Grill Combi Cooking

The following example will show you how to programme your oven with microwave power 360W and grill for a cooking time of 25 minutes.

- 1 Press **STOP/CLEAR**.



- 2 Turn **COOK MODE** to select **Grill Combi**.

The following indications are displayed: "🔥" "🔥🔥".

Press **START/QUICK START** for grill combi confirmation.



- 3 Turn **COOK MODE** until display shows "360 W".

Press **START/QUICK START** for power confirmation.



- 4 Turn **COOK MODE** until display shows "25:00".



- 5 Press **START/QUICK START**.



### ! NOTE

- Your oven has a combination cooking feature which allows you to cook food with **Heater** and **Microwave**. This generally means it takes less time to cook your food.
- You can set three kinds of microwave power level (180W, 270W, and 360W) in grill combi mode.
- This feature will allow you to brown and get food crisper more quickly.
- For the best result use the following accessory.



High rack

## Convection Preheat

The following example shows you how to preheat the oven to a temperature of 200° C.

- 1 Press **STOP/CLEAR**.



- 2 Turn **COOK MODE** to select **Conv.**

The following indication is displayed: "⚙️".

Press **START/QUICK START** for convection confirmation.



- 3 Turn **COOK MODE** until display shows "200° C".

Press **START/QUICK START** for temperature confirmation.



- 4 Press **START/QUICK START**.

Preheating will be started with the display "PREHEAT".



### ! NOTE

- The convection oven has a temperature range of 40° C and 100~230° C.
- The oven has a ferment function at the oven temperature of 40° C. You should wait until the oven is cool because you cannot use a ferment function if the oven temperature is over 40° C.
- Your oven will take a few minutes to reach the selected temperature.
- Once it has reached correct temperature, your oven will BEEP to let you know that it has reached the correct temperature.
- Then place your food in your oven and to start cooking.

## Convection Cooking

The following example shows you how to cook some food at a temperature of 230° C for 50 minutes.

- 1 Press **STOP/CLEAR**.



- 2 Turn **COOK MODE** to select **Conv.**

The following indication is displayed: "⚙️".

Press **START/QUICK START** for convection confirmation.



- 3 Turn **COOK MODE** until display shows "230° C".

Press **START/QUICK START** for temperature confirmation.



- 4 Turn **COOK MODE** until display shows "50:00".



- 5 Press **START/QUICK START**.



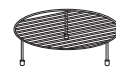
### ! CAUTION

Always use gloves when removing food and accessories after cooking as the oven & accessories will be very hot.

### ! NOTE

If you do not set a temperature your oven will automatically select 180° C, the cooking temperature can be changed by turning **COOK MODE**.

For the best result please use the following accessory.



**Low rack**

## Convection Combi Cooking

The following example shows you how to programme your oven with the microwave power 270W and at a convection temperature of 200° C for a cooking time of 25 minutes.

- 1 Press **STOP/CLEAR**.



- 2 Turn **COOK MODE** to select **Conv. Combi**.

The following indications are displayed: "≡", "⊞".

Press **START/QUICK START** for Convection Combi confirmation.



- 3 Turn **COOK MODE** until display shows "270 W".

Press **START/QUICK START** for power confirmation.



- 4 Turn **COOK MODE** until display shows "200° C".

Press **START/QUICK START** for temperature confirmation.



- 5 Turn **COOK MODE** until display shows "25:00".



- 6 Press **START/QUICK START**.



### CAUTION

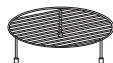
Always use gloves when removing food and accessories after cooking as the oven & accessories will be very hot.



### NOTE

You can set three kinds of microwave power level (180 W, 270 W and 360 W).

- For the best result use the following accessory.



Low rack

## More Or Less Cooking

The following example shows you how to change the COOK programmes for a longer or shorter cooking time.

- 1 Press **STOP/CLEAR**.



- 2 Set the required preset **COOK** program.

Select weight of food.



- 3 Press **START/QUICK START**.

Turn **COOK MODE**.

The cooking time will increase or decrease.



### NOTE

- If you find that your food is over or undercooked when using the preset COOK programme, you can increase or decrease cooking time by turning the **COOK MODE**.
- You can lengthen or shorten the cooking time (except defrost mode) at any point by turning the **COOK MODE**.



## Chef Recipe

The following example will show you how to Cook 0.6kg of roast beef.

- 1 Press **STOP/CLEAR**.



- 2 Press **CHEF RECIPE**.

The following indication is displayed: "**auto**".



- 3 Turn **COOK MODE** until display shows "4 ROAST BEEF".

Press **START/QUICK START** for category confirmation.



- 4 Turn **COOK MODE** until display shows "0.6 kg".

Press **START/QUICK START**.

When cooking you can increase or decrease cooking time by turning **COOK MODE**.



### ! NOTE

- Chef Recipe menus are programmed.
- Chef Recipe allows you to cook most of your favourite food by selecting the food type and the weight of the food.

## Chef Recipe Guide

Category	Instructions
<b>1. Quiche lorraine</b> - Food Temp : Room - Utensil : 28 cm Tart pan on the low rack	<b>Ingredients;</b> <i>1 baked pie shell \ 125 g smoked slab bacon, grated            1 tablespoons oil \ 2 eggs, lightly beaten \ 125 g milk            125 g cream \ Nutmeg, salt and pepper to taste \ 100 g grated cheese</i>  1. Place baked pie shell on a tart pan. 2. Cook bacon in lightly oiled frying pan until lightly browned and drain away excess fat. 3. Mix eggs, milk, cream, nutmeg, salt and pepper. 4. Spread grated cheese evenly onto baked pie shell. 5. Pour egg-cream mixture on top then place tart pan on the low rack. Choose the menu, press start.

## Chef Recipe Guide

Category	Instructions																																
<b>2. Rice/Pasta</b>  - Weight Limt : 0.1~0.3 kg - Food Temp : Room - Utensil : Microwaveable-safe bowl (deep glass pot)	<p><i>Ingredients for rice</i></p> <table><tr><td><i>Rice</i></td><td><i>100 g</i></td><td><i>200 g</i></td><td><i>300 g</i></td></tr><tr><td><i>Butter,melted</i></td><td><i>30 g</i></td><td><i>40 g</i></td><td><i>50 g</i></td></tr><tr><td><i>Onion,grated</i></td><td><i>50 g</i></td><td><i>75 g</i></td><td><i>100 g</i></td></tr><tr><td><i>Chicken stock or water</i></td><td><i>250 ml</i></td><td><i>500 ml</i></td><td><i>750 ml</i></td></tr><tr><td><i>Bouquet garni and salt</i></td><td colspan="3"><i>To taste</i></td></tr></table> <p>Add rice and melted butter in a deep and large bowl(3 L) and mix well. Pour boiling chicken stock or water and add bouquet garni and salt. Cover and vent with wrap.</p> <p>Place the bowl in the oven. Choose the menu and weight, press start. After cooking, stir and stand covered for 5~10 minutes if needed.</p> <p><i>Ingredients for pasta</i></p> <table><tr><td><i>Pasta</i></td><td><i>100 g</i></td><td><i>200 g</i></td><td><i>300 g</i></td></tr><tr><td><i>Water</i></td><td><i>400 ml</i></td><td><i>800 ml</i></td><td><i>1200 ml</i></td></tr><tr><td><i>Salt</i></td><td colspan="3"><i>To taste</i></td></tr></table> <p>Place pasta and boiling water with salt in a deep and large bowl (3 L). Place the bowl in the oven. Choose the menu and weight, press start. After cooking, stand for 1~2 minutes. Rinse pasta with cold water.</p>	<i>Rice</i>	<i>100 g</i>	<i>200 g</i>	<i>300 g</i>	<i>Butter,melted</i>	<i>30 g</i>	<i>40 g</i>	<i>50 g</i>	<i>Onion,grated</i>	<i>50 g</i>	<i>75 g</i>	<i>100 g</i>	<i>Chicken stock or water</i>	<i>250 ml</i>	<i>500 ml</i>	<i>750 ml</i>	<i>Bouquet garni and salt</i>	<i>To taste</i>			<i>Pasta</i>	<i>100 g</i>	<i>200 g</i>	<i>300 g</i>	<i>Water</i>	<i>400 ml</i>	<i>800 ml</i>	<i>1200 ml</i>	<i>Salt</i>	<i>To taste</i>		
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<b>3. Chocolate cake</b>  - Food Temp : Room - Utensil : 26 x 11 x 7.5 cm Pound cake pan on the low rack	<p><i>Ingredients</i></p> <p><i>70 g yoghurt \ 50 g raisin seed oil \ 170 g sugar \ 110 g Maizena</i> <i>50 g cocoa powder \ 1 teaspoon baking powder</i> <i>3 eggs, lightly beaten \ 1/4 teaspoon salt</i></p> <p>Mix yoghurt and sugar in a large mixing bowl. Add Maizena, cocoa powder, baking powder, salt and mix. Then add eggs and oil and mix until moistened. Pour batter into a greased pound cake pan. Place pound cake pan on the low rack. Choose the menu, press start. After cooking, remove from the oven and let them cool.</p>																																
<b>4. Roast beef</b>  - Weight Limt : 0.5~2.0 kg - Food Temp : Refrigerated - Utensil : Low rack on the metal tray	<p>Brush beef with melted butter or oil and season as desired.</p> <p>Place food on the low rack on the metal tray. Choose the menu and weight, press start.</p> <p>When BEEP sound occurs, turn food over and then press start to continue cooking. After cooking, stand covered with foil for 10 minutes.</p>																																
<b>5. Stuffed zucchini</b>  - Food Temp : Room - Utensil : Metal tray on the low rack	<p><i>Ingredients</i></p> <p><i>4 round zucchini (200 g per each) \ 500 g ground beef</i> <i>2 tablespoons olive oil \ Salt and pepper to taste</i></p> <p>Cut tops off zucchini to form hats and seed them, taking care not to pierce flesh or skin. Stuff zucchinis with ground beef and replace hat.</p> <p>Place stuffed zucchini on the metal tray on the low rack and drizzle with olive oil. Choose the menu, press start.</p>																																

## Chef Recipe Guide

Category	Instructions
<b>6. Gratin dauphinois</b> - Food Temp : Room - Utensil : 20 x 20 cm Baking dish on the low rack	<p><b>Ingredients</b>            1 kg potatoes \ 1 clove garlic \ 20 g butter / 300 g cream            100 g grated cheese \ Nutmeg, salt and pepper to taste</p> <p>Peel and wash potatoes then cut into 5 mm slices. Rub inside of a baking dish with garlic clove and butter.</p> <p>Place half of potatoes in the baking dish and season. Fill with remaining potatoes and season then pour cream and cheese over the top.</p> <p>Place the baking dish on the low rack. Choose the menu, press start.</p>
<b>7. Lasagna</b> - Food Temp : Room - Utensil : 26 x 17 cm Baking dish on the low rack	<p><b>Ingredients for meat sauce</b>            9 uncooked lasagna noodles \ 2 kg meat and tomato sauce            40 g grated cheese \ 4 tablespoons olive oil \ Salt and pepper to taste</p> <p>Place 3 lasagna noodles side by side on bottom of a baking dish, covering bottom. Spread 1/3 of meat and tomato sauce on top.</p> <p>Continue with 3 lasagna noodles and another 1/3 of meat and tomato sauce then finish with last 3 lasagna noodles and remaining meat and tomato sauce. Sprinkle grated cheese on top.</p> <p>Place baking dish on the low rack. Choose the menu, press start.</p> <p><b>※ Meat and tomato sauce</b>            1 celery stalk \ 2 onions \ 1 clove garlic \ 1.4 kg well-ripe tomatoes            1 sprig thyme \ 1 bay leaf \ 500 g ground beef \ Salt and pepper to taste</p> <p>Finely chop celery, onions, garlic and tomatoes.</p> <p>Cook celery, onions and garlic in a lightly oiled frying pan until soft.</p> <p>Add tomatoes, thyme, bay leaf, salt and pepper. Stir and simmer for 30 minutes.</p> <p>Cook ground meat in another lightly oiled frying pan for 5 minutes while stirring constantly. Pour tomato sauce into meat and cook for 5 minutes.</p>
<b>8. Apple tart</b> - Food Temp : Room - Utensil : 28 cm Tart pan on the low rack	<p><b>Ingredients</b>            1 baked pie shell \ 5 apples            20 grams sugar \ 2 tablespoons liquid honey</p> <ol style="list-style-type: none"> <li>1. Place baked pie shell on a tart pan.</li> <li>2. Chop 2 1/2 apples and place in a frying pan with sugar. Simmer until apple is soft. Cut remaining apples into 5 mm slices. Spread cooked apples onto bottom of pie shell and arrange sliced apples in spiraling rosettes over entire surface. Finally spread honey on top.</li> <li>3. Place tart pan on the low rack. Choose the menu and weight, press start. After cooking, remove from the oven and let them cool.</li> </ol>

# Active Convection

The following example will show you how to Cook 0.3kg of chicken pieces.

- 1 Press **STOP/CLEAR**.



- 2 Press **ACTIVE CONVECTION**.

The following indication is displayed: "⊗".



- 3 Turn **COOK MODE** until display shows "2 CHICKEN PIECES".

Press **START/QUICK START** for category confirmation.



- 4 Turn **COOK MODE** until display shows "0.3 kg".

Press **START/QUICK START**.

When cooking you can increase or decrease cooking time by turning **COOK MODE**.



## NOTE

- Active Convection menus are programmed.
- Active Convection allows you to cook most of your favourite food by selecting the food type and the weight of the food.

# Active Convection Guide

Category	Instructions
<b>1. Roast chicken</b> - Weight Limit : 0.8~1.8 kg - Food Temp : Refrigerated - Utensil : Low rack on the metal tray	Brush whole chicken with melted butter or oil and season as desired. Place whole chicken breast-side down on the low rack on the metal tray. Choose the menu and weight, press start. When BEEP sound occurs, drain juices and turn food over immediately. And then press start to continue cooking. After cooking, stand covered with foil for 10 minutes.
<b>2. Chicken pieces</b> - Weight Limit : 0.2~0.8 kg - Food Temp : Refrigerated - Utensil : High rack on the metal tray	Brush chicken pieces with melted butter or oil and season as desired. Place food on the high rack on the metal tray. Choose the menu and weight, press start. When BEEP sound occurs, turn food over and press start to continue cooking.
<b>3. Roast pork</b> - Weight Limit : 0.5~2.0 kg - Food Temp : Refrigerated - Utensil : Low rack on the metal tray	Brush pork with melted butter or oil and season as desired. Place food on the low rack on the metal tray. Choose the menu and weight, press start. After cooking, stand covered with foil for 10 minutes.

## Active Convection Guide

Category	Instructions
<b>4. Fresh pizza</b> - Food Temp : Room - Utensil : Metal tray on the low rack	<p><b>Ingredients</b></p> <p><i>Dough:</i>            120 g all-purpose or bread flour \ 1 teaspoon active dry yeast            1/3 teaspoon salt \ 1 teaspoon sugar \ 70 ml warm water            1 teaspoon extra-virgin olive oil, plus little for coating</p> <p><i>Topping :</i>            3 tablespoons tomato sauce \ 30 g sausage, sliced            1/2 onion, sliced \ 2 fresh mushrooms, sliced            1/2 fresh pepper \ 100 g shredded Mozzarella cheese</p> <p>Combine all ingredients in a large mixing bowl.            Knead with an electric mixer to make smooth and elastic dough.            Roll dough out and place dough on the metal tray.            Spread pizza sauce. Top with toppings and cheese.            Place the metal tray on the low rack. Choose the menu, press start.</p>
<b>5. Cookies</b> - Food Temp : Room - Utensil : High rack + Low rack Room	<p><b>Ingredients;</b></p> <p>80 g brown sugar \ 80 g butter, softened            1 egg, lightly beaten \ 180 g all-purpose flour, sifted            1/2 teaspoon baking powder \ 1/2 teaspoon baking soda            100 g mini chocolate chips</p> <p>Mix brown sugar and softened butter. Gradually add egg and stir until light and fluffy. Add flour, baking powder, baking soda and chocolate chips and mix well.            Drop dough by tablespoon onto the high rack and low rack covered with aluminum foil. Cookies should be spaced 2 cm apart.            Place high rack and low rack in the oven. Choose the menu, press start.            After cooking, place food on the low rack and let them cool.</p>
<b>6. Baked potatoes</b> - Weight Limit : 0.2~1.0 kg - Food Temp : Room - Utensil : Low rack	<p>Choose medium sized potatoes (200~220 g per each).            Wash and dry potatoes. Pierce potatoes several times with a fork.            Place food on the low rack. Choose the menu and weight, press start.            After cooking, stand covered with foil for 10 minutes.</p>
<b>7. Small cakes</b> - Food Temp : Room - Utensil : Paper muffin cups on the metal tray on the low rack	<p><b>Ingredients;</b></p> <p>60 g sugar \ 100 g butter, softened            2 eggs, lightly beaten \ 150 g all-purpose flour, sifted            1/2 teaspoon baking powder            10~13 ea paper muffin cups (50 mm base x 30 mm height)</p> <p>Mix sugar and softened butter. Gradually add eggs and stir until light and fluffy. Add flour and baking powder and mix well.            Evenly fill paper muffin cups with butter (25~30 g per each). Place muffin cups on the metal tray on the low rack. Choose the menu, press start.            After cooking, place food on the low rack and let them cool.</p>

# Grill Temp control

The following example will show you how to Cook High (80° C) 30 min keep warm

- 1 Press **STOP/CLEAR**.



- 2 Press **GRILL TEMP CONTROL**.

The following indication is displayed: "🔥🔥".



- 3 Turn **COOK MODE** until display shows "2 KEEP WARM".

Press **START/QUICK START** for category confirmation.



- 4 Turn **COOK MODE** until display shows "80° C".

Press **START/QUICK START**.

Turn **COOK MODE** until display shows "30:00".



- 5 Press **START/QUICK START**.



## NOTE

For the best results with the grill temp control function, be sure to keep the oven cavity has cooled before use.

# Grill Temp Control Guide

Category	Instruction																			
<b>1. Slow cook</b>  -Weight Limit : 110° C (High) / 90° C (Low)  -Utensil : Heatproof glass dish with cover on turntable	<p>This function maintains a relatively low temperature compared to other cooking methods (such as baking, boiling, and frying), for many hours allowing unattended cooking of pot roast, stew, and other suitable dishes.</p> <p><b>90° C (Low) Setting</b> The low setting gently simmers food for an extended period of time without overcooking or burning. No stirring is required when using this setting.</p> <p><b>110° C (High) Setting</b> The high setting will cook food in approximately half the time required for the low setting. Some foods may boil when cooked on the high setting, so it may be necessary to add extra liquid. Occasional stirring of stews and casseroles will improve flavor distribution.</p> <p>Searing and browning before slow cooking is not necessary, but this will help to seal in the juices and flavours, and keeps the meat tender.</p> <p><b>Slow cook guide;</b></p> <table><tr><th rowspan="2">Traditional cooking time</th><th colspan="2">Slow cooker cooking time (without searing)</th><th colspan="2">Slow cooker cooking time (with searing)</th></tr><tr><th>90° C(Low)</th><th>110° C(High)</th><th>90° C(Low)</th><th>110° C(High)</th></tr><tr><td>35 to 60 minutes</td><td>6 to 10 hrs</td><td>3 to 4 hrs</td><td>4 to 6 hrs</td><td>2 to 3 hrs</td></tr><tr><td>1 to 3 hours</td><td>8 to 10 hrs</td><td>4 to 6 hrs</td><td>5 to 6 hrs</td><td>3 to 4 hrs</td></tr></table>	Traditional cooking time	Slow cooker cooking time (without searing)		Slow cooker cooking time (with searing)		90° C(Low)	110° C(High)	90° C(Low)	110° C(High)	35 to 60 minutes	6 to 10 hrs	3 to 4 hrs	4 to 6 hrs	2 to 3 hrs	1 to 3 hours	8 to 10 hrs	4 to 6 hrs	5 to 6 hrs	3 to 4 hrs
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<b>2. Keep warm</b>  - Weight Limit : 60° C~ 80° C - Utensil : Heatproof glass dish with cover on turntable	<p>Heat from the top and bottom elements are used to maintain set temperature. You can use this function to keep food warm until ready to serve.</p>																			

## Grill Temp Control Guide

Category	Instruction																																													
<b>3. Food dry</b> - Weight Limit : 40° C ~ 90° C - Utensil : Metal tray on the low rack	<p>With this function, you can dry fruit, veggies, and beef into healthy and nutritional snacks and tasty jerky without chemicals and preservatives. Place baking paper on tray and spread food into a single layer.</p> <p><b>Food dry guide</b></p> <table><tr><th>Food type</th><th>Preparation</th><th>Set temp</th><th>Time</th><th>Use</th></tr><tr><td>Bananas</td><td>Slice into 5~6mm thick</td><td>60° C</td><td>5~8hrs</td><td>Snacks, baby food, granola, cookies and banana bread</td></tr><tr><td>Figs</td><td>Remove stems and halve</td><td>60° C</td><td>8~10 hrs</td><td>Fillings, cakes, puddings, breads and cookies</td></tr><tr><td>Kiwi</td><td>Peel, slice into 8~12 mm thick</td><td>60° C</td><td>5~8 hrs</td><td>Snacks</td></tr><tr><td>Mangos</td><td>Remove skin, slice into 6~10 mm thick</td><td>60° C</td><td>6~10 hrs</td><td>Snacks, cereals, baked goods</td></tr><tr><td>Pineapple</td><td>Peel, core, slice into 8~12 mm thick</td><td>60° C</td><td>6~10 hrs</td><td>Snacks, baked goods, baked granola</td></tr><tr><td>Tomatoes</td><td>Wash and slice 6 mm circles</td><td>60° C</td><td>6~10 hrs</td><td>Soups, stews, paste or sauce</td></tr><tr><td>Mushroom</td><td>Clean with soft brush or cloth. Don't wash</td><td>50° C</td><td>4~8 hrs</td><td>Rehydrate for soups, meat dishes, omelettes or frying</td></tr><tr><td>Beef jerky</td><td>Marinate sliced meats (5~6 mm thick) in store-bought or your own recipe for 6 to 8 hours in the refrigerator</td><td>70° C</td><td>6~10 hrs</td><td>Snack</td></tr></table>	Food type	Preparation	Set temp	Time	Use	Bananas	Slice into 5~6mm thick	60° C	5~8hrs	Snacks, baby food, granola, cookies and banana bread	Figs	Remove stems and halve	60° C	8~10 hrs	Fillings, cakes, puddings, breads and cookies	Kiwi	Peel, slice into 8~12 mm thick	60° C	5~8 hrs	Snacks	Mangos	Remove skin, slice into 6~10 mm thick	60° C	6~10 hrs	Snacks, cereals, baked goods	Pineapple	Peel, core, slice into 8~12 mm thick	60° C	6~10 hrs	Snacks, baked goods, baked granola	Tomatoes	Wash and slice 6 mm circles	60° C	6~10 hrs	Soups, stews, paste or sauce	Mushroom	Clean with soft brush or cloth. Don't wash	50° C	4~8 hrs	Rehydrate for soups, meat dishes, omelettes or frying	Beef jerky	Marinate sliced meats (5~6 mm thick) in store-bought or your own recipe for 6 to 8 hours in the refrigerator	70° C	6~10 hrs	Snack
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<b>4. Proof</b> - Weight Limit : 40° C - Utensil : Heatproof glass dish on the low rack	<p><b>How to make yogurt</b></p> <ul style="list-style-type: none"><li>• Pour a 1000ml milk into a proper heat-resistant bowl with cover.</li><li>• Boil it to proper temperature (up to 60~70° C) and then cool down to about 40° C</li><li>• Add 150 ml natural yogurt into a bowl and stir well.</li><li>• Place covered bowl in the oven.</li><li>• Choose the menu, and set cook time 5~8 hours.</li></ul> <p><b>How to raise yeast dough</b></p> <ul style="list-style-type: none"><li>• Place the dough in a proper heat-resistant bowl and cover with baking wrap or damp cloth.</li><li>• Place the bowl in the oven.</li><li>• Choose the menu, and set cook time about 40 minutes until the dough has doubled in volume.</li></ul>																																													
<b>5. Plate warming</b> - Weight Limit : 40° C ~ 100° C - Utensil : On the low rack	<p>Use this function to warm plates to a hot and comfortable temperature.</p>																																													

# Crispy Reheat

The following example will show you how to cook 0.5kg of lasagna.

- 1 Press **STOP/CLEAR**.



- 2 Press **CRISPY REHEAT**.

The following indication is displayed: "auto".



- 3 Turn **COOK MODE** until display shows "2 LASAGNA".

Press **START/QUICK START** for category confirmation.



- 4 Turn **COOK MODE** until display shows "0.5 kg".

Press **START/QUICK START**.

When cooking you can increase or decrease cooking time by turning **COOK MODE**.



## NOTE

- Crispy Reheat menus are programmed.
- Crispy Reheat allows you to cook most of your favourite food by selecting the food type and the weight of the food.

# Crispy Reheat Guide

Category	Instructions
<b>1. Cordon bleu</b> - Weight Limit : 0.2~0.8 kg - Food Temp : Refrigerated - Utensil : Heatproof glass dish on the low rack	Place leftover cordon bleu (100~150 g/piece) on a heatproof glass dish on the low rack. Choose the menu and weight, press start.
<b>2. Lasagna</b> - Weight Limit : 0.2~0.8 kg - Food Temp : Refrigerated - Utensil : Heatproof glass dish on the low rack	Cut leftover lasagna into pieces (200~250 g/piece). Place food a heatproof glass dish on the low rack. Choose the menu and weight, press start.
<b>3. Bread</b> - Weight Limit : 0.1~0.3 kg - Food Temp : Frozen - Utensil : Low rack	Place frozen bread (50~100 g/piece) on the low rack. Choose the menu and weight, press start.
<b>4. Pie/Tart</b> - Weight Limit : 0.2~0.8 kg - Food Temp : Refrigerated - Utensil : Heatproof glass dish on the low rack	Cut leftover pie/tart into pieces (200~250 g/piece). Place food on a heatproof glass dish on the low rack. Choose the menu and weight, press start.



## Defrost & Bake

The following example will show you how to cook 0.4 kg of pizza.

- 1 Press **STOP/CLEAR**.



- 2 Press **DEFROST & BACK**.

The following indication is displayed: "auto".



- 3 Turn **COOK MODE** until display shows "4 PIZZA".

Press **START/QUICK START** for category confirmation.



- 4 Turn **COOK MODE** until display shows "0.4 kg".



- 5 Press **START/QUICK START**.

When cooking you can increase or decrease cooking time by turning **COOK MODE**.



## Defrost & Bake Guide

Category	Instructions
<b>1. Quiche</b> - Weight Limit : 0.3~1.0 kg - Food Temp : Frozen - Utensil : Heatproof glass dish on the low rack	Remove quiche from box packages and remove tray. Place food on a heatproof glass dish on the low rack. Choose the menu and weight, press start.
<b>2. Lasagna</b> - Weight Limit : 0.3~0.6 kg - Food Temp : Frozen - Utensil : Low rack	Remove lasagna from box packages and remove cover. Place food on the low rack. Choose the menu and weight, press start.
<b>3. Tart</b> - Weight Limit : 0.2~0.8 kg - Food Temp : Frozen - Utensil : Heatproof glass dish on the low rack	Remove tart from box packages and remove tray. Place food on a heatproof glass dish on the low rack. Choose the menu and weight, press start.
<b>4. Pizza</b> - Weight Limit : 0.3~0.6 kg - Food Temp : Frozen - Utensil : Metal tray on the low rack	Remove frozen pizza from box packages. Place food on the metal tray on the low rack. Choose the menu and weight, press start.

## Auto Defrost

The temperature and density of food varies, it is recommended that the food be checked before cooking begins. Pay particular attention to large joints of meat and chicken, some foods should not be completely thawed before cooking.

For example: Fish cooks so quickly that it is sometimes better to begin cooking while still slightly frozen. This will require a standing time to allow the centre to thaw.

Weigh the food that you are about to defrost. Be certain to remove any metallic ties or wraps; then place the food onto the microwaveable-safe dish on the glass tray in your oven and close the oven door.

The following example will show you how to defrost 0.8kg of frozen poultry.

- 1 Press **STOP/CLEAR**.



- 2 Press **AUTO DEFROST**.

The following indication is displayed: "00".



- 3 Turn **COOK MODE** until display shows "2 POULTRY".

Press **START/QUICK START** for category confirmation.



- 4 Turn **COOK MODE** until display shows "0.8 kg" for the weight of frozen food.

Press **START/QUICK START**.



- 5 During defrosting your oven will "BEEP", at which point you should open the oven door, turn food over and separate it to ensure even thawing. Remove any portions that have thawed or shield them to help slow down thawing. After checking, close the oven door and press **START/QUICK START** to resume defrosting.

**Your oven will not stop defrosting (even when the BEEP sounds) unless the door is opened.**

### ! NOTE

- Your oven has 4 microwave defrost settings: - **Meat, Poultry, Fish** and **Bread**; each defrost category has different power settings.
- Food to be cooked should be placed in a microwaveable-safe utensil.
- Please do not use the following accessory.



High rack



Low rack

## Defrosting Guide

- \* Food to be defrosted should be placed in a suitable microwave proof container and placed uncovered on the glass tray.
- \* If necessary, shield small areas of meat or poultry with flat pieces of aluminum foil. This will prevent thin areas from becoming warm during defrosting. Ensure the foil does not touch the oven walls.
- \* Separate items like minced meat, chops, sausages and bacon as soon as possible.

**When BEEP sounds, turn food over.** Remove defrosted portions. Continue to defrost remaining pieces.

After defrosting, allow to stand until completely thawed.

Category	Instructions
<b>1. Meat</b> - Weight Limit : 0.1~4.0 kg - Utensil : Microwaveable-safe plate	- Minced beef, Fillet steak, Cubes for stew, Sirloin steak, Pot roast, Rump roast, Beef burger, Pork chops, Lamb chops, Rolled roast, Sausage, Cutlets(2 cm). - Turn food over at BEEP. - After defrosting, cover with aluminum foil and let stand for 5~15 minutes.
<b>2. Poultry</b> - Weight Limit : 0.1~4.0 kg - Utensil : Microwaveable-safe plate	- Whole chicken, Legs, Breasts, Turkey breasts (under 2.0 kg). - Turn food over at BEEP. - After defrosting, let stand for 20~30 minutes.
<b>3. Fish</b> - Weight Limit : 0.1~4.0 kg - Utensil : Microwaveable-safe plate	- Fillets, Steaks, Whole fish, Seafood. - Turn food over at BEEP. - After defrosting, let stand for 10~20 minutes.
<b>4. Bread</b> - Weight Limit : 0.1~0.5 kg - Utensil : Paper towel	- Sliced bread, Buns, Baguette, etc. - After defrosting, let stand for 1 minute.

## FOOD CHARACTERISTICS & MICROWAVE COOKING

### Keeping an eye on things

The recipes in this book have been formulated with great care, but your success in preparing them depends on how much attention you pay to the food as it cooks. Always watch your food while it cooks. Your microwave function is equipped with a light that turns on automatically when the oven is in operation so that you can see inside and check the progress of your food. Directions given in recipes to elevate, stir, and the like should be thought of as the minimum steps recommended. If the food seems to be cooking unevenly, simply make the necessary adjustments you think are appropriate to correct the problem.

### Factors affecting microwave cooking times

Many factors affect cooking times. The temperature of ingredients used in a recipe makes a big difference in cooking times. For example, a cake made with ice-cold butter, milk, and eggs will take considerably longer to bake than one made with ingredients that are at room temperature. All of the recipes in this book give a range of cooking times. In general, you will find that the food remains under-cooked at the lower end of the time range, and you may sometimes want to cook your food beyond the maximum time given, according to personal preference. The governing philosophy of this book is that it is best for a recipe to be conservative in giving cooking times because overcooked food is ruined for good. Some of the recipes, particularly those for bread, cake, and custards, recommend that food be removed from the oven when they are slightly undercooked. This is not a mistake. When allowed to stand, usually covered, these foods will continue to cook outside of the oven as the heat trapped within the outer portions of the food gradually travels inward. If the food is left in the oven until it is cooked all the way through, the outer portions will become overcooked or even burnt. You will become increasingly skillful in estimating both cooking and standing times for various foods.

### Density of food

Light, porous food such as cakes and breads cook more quickly than heavy, dense foods such as roasts and casseroles. You must take care when microwaving porous food so that the outer edges do not become dry and brittle.

### Height of food

The upper portion of tall foods, particularly roasts, will cook more quickly than the lower portion. Therefore, it is wise to turn tall food several times, during cooking.

### Moisture content of food

Since the heat generated from microwaves causes moisture to evaporate, relatively dry food such as roasts and some vegetables should either be sprinkled with water prior to cooking or covered to retain moisture.

### Bone and fat content of food

Bones conduct heat and fat cooks more quickly than meat. Care must be taken when cooking bony or fatty cuts of meat in order to prevent unevenly or overcooked meat.

### Quantity of food

The number of microwaves in your oven remains constant regardless of how much food is being cooked. Therefore, the more food you place in the oven, the longer the cooking time. Remember to decrease cooking times by at least one third when halving a recipe.

### Shape of food

Microwaves penetrate only about 2 cm into food, the interior portion of thick foods are cooked as the heat generated on the outside travels inward. Only the outer edge of food is cooked by microwave energy; the rest is cooked by conduction. The worst possible shape for a food that is to be microwaved is a thick square. The corners will burn long before the centre is even warm. Round thin foods and ring shaped foods cook most successfully in the microwave.

### Covering

A cover traps heat and steam which causes food to cook more quickly. Use a lid or microwave cling film with a corner folded back to prevent spitting.

# FOOD CHARACTERISTICS & MICROWAVE COOKING

## Browning

Meats and poultry that are cooked fifteen minutes or longer will brown lightly in their own fat. Foods that are cooked for a shorter period of time may be brushed with a browning sauce such as worcestershire sauce, soy sauce or barbecue sauce to achieve an appetising colour. Since relatively small amounts of browning sauces are added to food, the original flavour of the recipe is not altered.

## Covering with greaseproof paper

It provides a looser cover than a lid or cling film, which may dry food out slightly. But because it makes a looser cover than a lid or clingfilm, it allows the food to dry out slightly.

## Arranging and spacing

Individual foods such as baked potatoes, small cakes and hors d'oeuvres will heat more evenly if placed in the oven at an equal distance apart, preferably in a circular pattern. Never stack foods on top of one another.

## Stirring

Stirring is one of the most important of all microwaving techniques. In conventional cooking, food is stirred for the purpose of blending. Microwaved food, however, is stirred in order to spread and redistribute heat. Always stir from the outside towards the centre as the outside of the food heats first.

## Turning over

Large, tall foods such as roasts and whole chickens should be turned so that the top and bottom will cook evenly. It is also a good idea to turn cut up chicken and chops.

## Placing thicker portions facing outwards

Since microwaves are attracted to the outside portion of food, it makes sense to place thicker portions of meat, poultry and fish to the outer edge of the baking dish. This way, thicker portions will receive the most microwave energy and the food will cook evenly.

## Shielding

Strips of aluminium foil (which block microwaves) can be placed over the corners or edges of square and rectangular foods to prevent those portions from overcooking. Never use too much foil and make sure the foil is secured to the dish or it may cause 'arcing' in the oven.

## Elevating

Thick or dense foods can be elevated so that microwaves can be absorbed by the underside and centre of the foods.

## Piercing

Foods enclosed in a shell, skin or membrane are likely to burst in the oven unless they are pierced prior to cooking. Such foods include yolks and whites of eggs, clams and oysters and whole vegetables and fruits.

## Testing if cooked

Food cooks so quickly in a oven, it is necessary to test it frequently. Some foods are left in the microwave until completely cooked, but most foods, including meats and poultry, are removed from the oven while still slightly undercooked and allowed to finish cooking during standing time. The internal temperature of foods will rise between 5° F (3° C) and 15° F (8° C) during standing time.

## Standing time

Foods are often allowed to stand for 3 to 10 minutes after being removed from the oven. Usually the foods are covered during standing time to retain heat unless they are supposed to be dry in texture (some cakes and biscuits, for example). Standing allows foods to finish cooking and also helps flavour blend and develop.

# To Clean Your Oven

## 1 Keep the inside of the oven clean

Food spatters or spilled liquids stick to oven walls and between the seal and door surfaces. It is best to wipe up spillovers with a damp cloth right away. Crumbs and spillovers will absorb microwave energy and lengthen cooking times. Use a damp cloth to wipe out crumbs that fall between the door and the frame. It is important to keep this area clean to assure a tight seal. Remove greasy spatters with a soapy cloth then rinse and dry. Do not use harsh detergent or abrasive cleaners. The metal tray can be washed by hand or in the dishwasher.

## 2 Keep the outside of the oven clean

Clean the outside of your oven with soap and water then with clean water and dry with a soft cloth or paper towel. To prevent damage to the operating parts inside the oven, the water should not be allowed to seep into the ventilation openings. To clean control panel, open the door to prevent the oven from accidentally starting, and wipe with a damp cloth, followed immediately by a dry cloth. Press Stop/Clear after cleaning.

- 3 If steam accumulates inside or around the outside of the oven door, wipe the panels with a soft cloth. This may occur when the oven is operated under high humidity conditions and in no way indicates a malfunction of the unit.
- 4 The door and door seals should be kept clean. Use only warm, soapy water, rinse then dry thoroughly. DO NOT USE ABRASIVE MATERIALS, SUCH AS CLEANING POWDERS OR STEEL AND PLASTIC PADS. Metal parts will be easier to maintain if wiped frequently with a damp cloth.
- 5 Do not use steam cleaners.
- 6 Unplug your oven from the electrical socket when you clean the control panel with a wet cloth or spray water on control glass to clean. If it is not Unplugged, this product can be operated by touching the Quick Start button.

# QUESTIONS & ANSWERS

FAQ	Answer
What's wrong when the oven light does not glow?	There may be several reasons why the oven light does not glow. Either the light bulb has blown or the electric circuit has failed.
Does microwave energy pass through the viewing screen in the door?	No. The holes, or ports, are made to allow light to pass; they do not let microwave energy through.
Why does the BEEP tone sound when a button on the control panel is touched?	The BEEP tone sounds to assure that the setting is being properly entered.
Will the microwave function be damaged if it operates empty?	Yes. Never run it empty.
Why do eggs sometimes pop?	When baking, frying, or poaching eggs, the yolk may pop due to steam build up inside the yolk membrane. To prevent this, simply pierce the yolk before cooking. Never microwave eggs in the shell.
Why is standing time recommended after microwave cooking is over?	After microwave cooking is finished, food keeps on cooking during standing time. This standing time finishes evenly cooking throughout the food. The amount of standing time depends on the density of the food.
Why doesn't my oven always cook as fast as the cooking guide says?	Check your cooking guide again to make sure you've followed directions correctly, and to see what might cause variations in cooking time. Cooking guide times and heat settings are suggestions, chosen to help prevent overcooking, the most common problem in getting used to this oven. Variations in the size, shape, weight and dimensions of the food require longer cooking time. Use your own judgement along with the cooking guide suggestions to test food conditions, just as you would do with a conventional cooker.

## TEST DISHES IN ACCORDANCE WITH EN 60705

Function	Meal	Microwave Wattage Setting	Heating Temperature	Notes
Microwave defrosting	Meat	Auto key function	-	Place a flat plate on the center of the glass tray. Use the "Auto defrost 1" function and select appropriate weight. When BEEP sound occurs, turn food over and press start to continue cooking.
Microwave cooking	Custard	360 W, 28~35 min	-	Place a Pyrex dish on the center of the glass tray.
	Sponge cake	900 W, 4~5 min	-	Place a ø22 cm Pyrex dish on the center of the glass tray.
	Meat loaf	540 W, 13~25 min	-	Place a Pyrex dish on the center of the glass tray.
Combination cooking with the microwave	Potato gratin	360 W, 25~29 min	200° C	Place a ø22 cm Pyrex dish on low rack.
	Cake	-	170° C	Place a ø22 cm Pyrex dish on low rack.
	Chicken	Auto key function	-	Place chicken breast-side down on the low rack on a drip dish. Use the "Active convection 1" function and select appropriate weight. When BEEP sound occurs, turn food over and press start to continue cooking.

## TECHNICAL SPECIFICATIONS

MJ3281BS		
Power Input		230 V~ 50 Hz
Output		900 Watt (IEC60705 rating standard)
Microwave Frequency		2450 MHz
Outside Dimension		530 mm(W) X 322 mm(H) X 533 mm(D)
Power Consumption	Max.	2600 Watt
	Microwave	1400 Watt
	Grill	1250 Watt
	Convection	1250 Watt (Max. 2450 Watt)
	Combination	Max. 2600 Watt

### Disposal of your old appliance



1. When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.
2. All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.
3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

MEMO





